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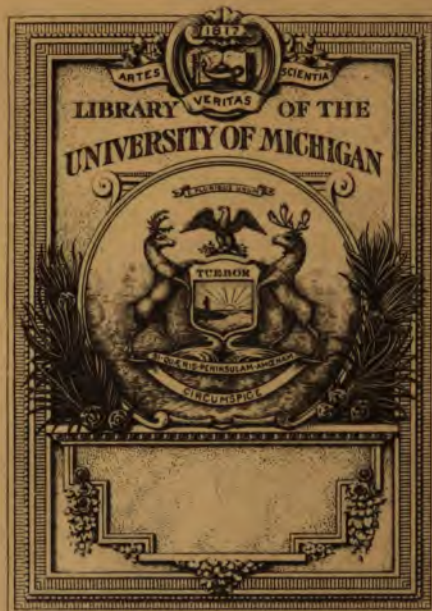
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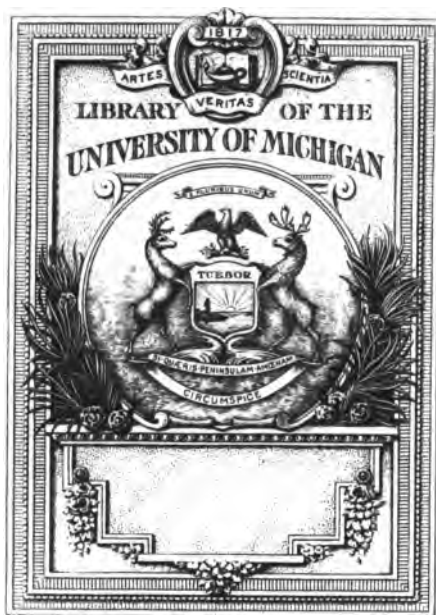
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Second and Enlarged Edition

THE H. W. WILSON COMPANY
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1914

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EXPLANATORY NOTE

This volume, like the others of the series to which it belongs, has been compiled for the benefit of students and debaters, and for libraries wishing to supply good material in convenient form on the subject of government ownership. The present status of government regulation and government ownership of railroads in the United States and other countries, is briefly outlined in the Introduction and the General Discussion, while the Affirmative and Negative Discussions contain reprints of valuable material covering the arguments for and against the adoption of government ownership by the United States. The bibliography is a selected one, the references having been chosen so as to give the reader access to the most usable and most easily obtainable material. Students wishing to make a more extended study are recommended to consult the bibliographies listed elsewhere in this volume.

June, 1912.

EXPLANATORY NOTE TO SECOND EDITION

Practically all the material included in the first edition of this handbook has been retained in this new edition, and the volume has been brought up to date by the inclusion of recent references and magazine articles. The introductory chapter has also been revised to date.

May, 1914.

CONTENTS

BRIEF:

Introduction.	xi
Affirmative.....	xii
Negative	xv

BIBLIOGRAPHY:

Bibliographies.....	xxi
General References.....	xxi
Affirmative References.	xxviii
Negative References.....	xxx

INTRODUCTION	I
--------------------	---

GENERAL DISCUSSION:

Ely, Richard T. Nature of the Railway Problem.....	Harper's 5
Crammond, Edgar. Nationalisation of British Railways..	Quarterly Review 13
Brown, C. S. Vesey-. Nationalization of Railways.....	Cassier's 14
Knapp, Martin A. Government Ownership of Railroads....	Annals of the American Academy 24

AFFIRMATIVE DISCUSSION:

Bacon, Edward P. Inadequate Powers of the Interstate Commerce Commission.....	North American 37
Washburn, William D., Jr. Railroad Regulation.....	41
Oberg, Erik. Public Ownership of Railroads.....	Public 44
Rice, Isaac L. Remedy for Railway Abuses.....	North American 49
Phillips, John B. Possibilities of Government Railroad Control	Arena 56

Ely, Richard T. Natural Monopolies and the Workingman	North American	61
Davis, C. Wood. Should the Nation Own the Railways?	Arena	68
Schindler, Solomon. Nationalization of Railroads...Arena		82
Parsons, Frank. Railway Experience of Germany...Arena		84
Powderly, T. V. Government Ownership of Railways....	Arena	88
Government Ownership of Railroads.....	Public	90
Uncle Sam as a Railroad Magnate.....	Current Literature	92
Vrooman, Carl S. Railway Nationalization not Confiscatory	Arena	94
Newlands, Francis G. Common Sense of the Railroad Question	North American	95
Eltzbacher, O. Railways of Germany.....	Contemporary Review	97
Bradford, Ernest S. Prussian Railway Administration....	Annals of the American Academy	103
Holcombe, A. N. First Decade of the Swiss Federal Railways	Quarterly Journal of Economics	104
Hirsch, Max. Government Railways in Australia...Public		112
Brown, A. A. Government-Owned Railways of New Zealand	Arena	114

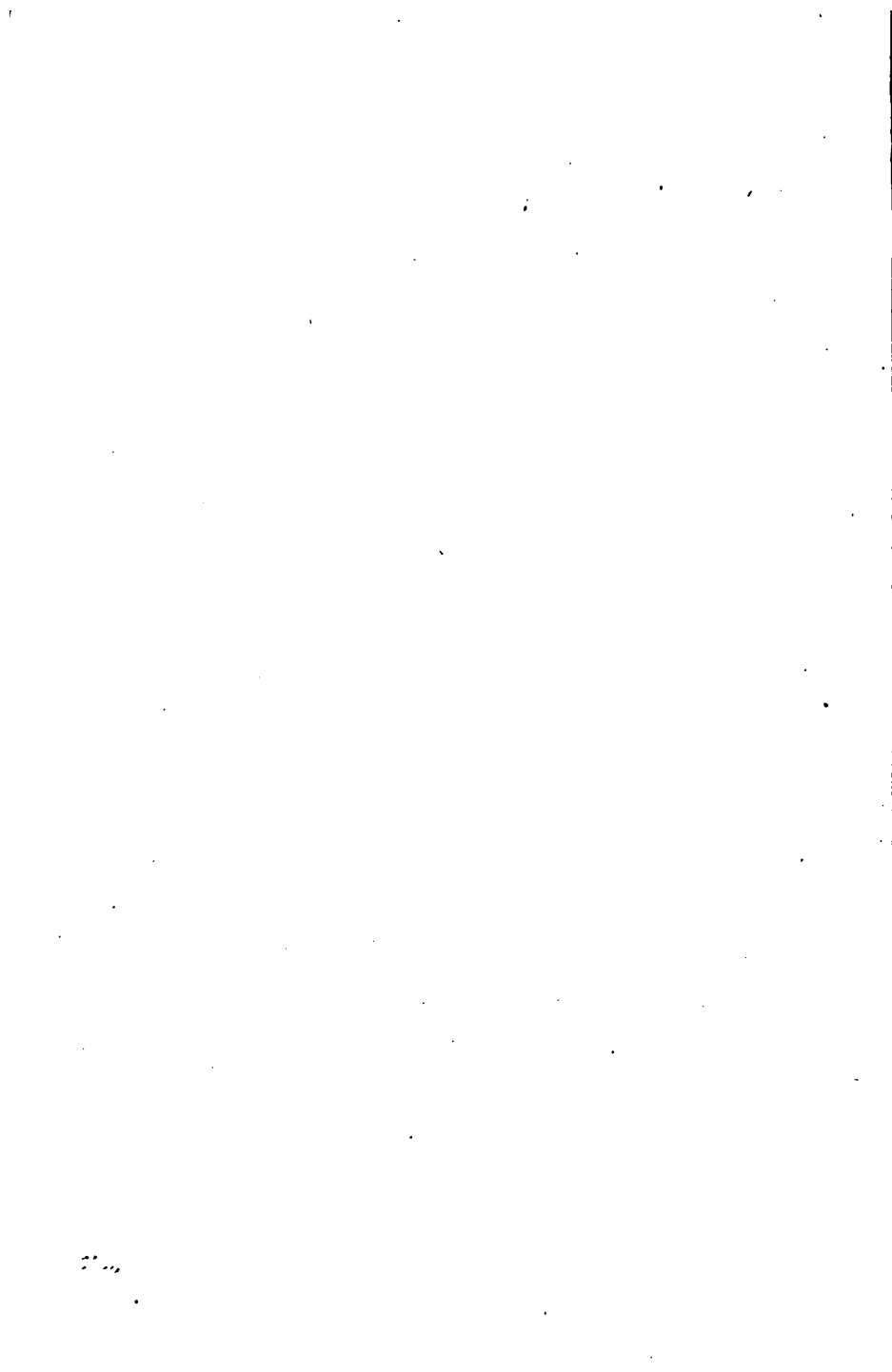
NEGATIVE DISCUSSION :

Grinnell, W. Morton. Railway Rates....	North American	119
Bryce, Lloyd. Railway Problem.....	North American	120
Newcomb, H. T. Decade in Federal Railway Regulation..	Popular Science Monthly	123
Beveridge, Albert J. Supervision, not Ownership..	Reader	124
Baer, George F. Should the Government Control Private Earnings?	Harper's Weekly	127
Willcox, David. Government Rate-Making Is Unnecessary and Would Be Very Dangerous.....	North American	129
Arnold, B. W., Jr. Railroads and the Government.....	Gunton's	136

CONTENTS

ix

Newcomb, H. T. Public Ownership and the Wage-Earners	Science	142
Dunn, Samuel O. Fair Regulation of Railroads.....	North American	143
Seligman, Edwin R. A. Government Ownership of Quasi-Public Corporations	Gunton's	144
Robertson, William A. Argument against Government Railroads in the United States.....	Annals of the American Academy	146
State Ownership of Railways	Harper's Weekly	156
Dewsnup, Ernest R. Attitude of the State toward Railways.....	American Economic Association. Bulletin	159
Cook, William W. Industrial Democracy or Monopoly?..	McClure's	170
Switzerland's Railway Success.....	Nation	172
Hill, William. State Railways in Australia.....	Journal of Political Economy	174
Rossignol, James E., and Stewart, William D. Railways in New Zealand.....	Quarterly Journal of Economics	175
ADDITIONAL REPRINTS:		
Esch, John J. Is Government Ownership in Sight.....	Railway Age Gazette	181
Government Railroads for Alaska.....	Engineering Record	184
Wilson, H. Raynar. State Purchase of Railways in Great Britain.....	Engineering News	186
Beveridge, Albert J. Canada's Government Railways....	Review of Reviews	189
Government Railroad Mismanagement in Canada.....	Railway Age Gazette	203
Beaulieu, Paul LeRoy-. Public Ownership in France.....	North American Review	206
Bonner, Francis A. State Railway Operation in Western Australia.....	Railway Age Gazette	210



BRIEF

Resolved, That the United States should own and operate the railroads.

INTRODUCTION

- I. The railroad problem is a serious and important one.
 - A. Our dependence upon railways has become universal.
 1. The railroad is a factor in every step of modern production.
 2. Everyone must in some way depend upon it or abandon his attempts to obtain a livelihood.
 - B. The railroad problem is fundamental in its relation to
 1. Economic and political liberty.
 2. Legitimate investment and business enterprise.
 3. Labor.
 4. The wise management of our natural resources.
- II. The railways of the world may be roughly divided into two groups.
 - A. Those owned and administered by private companies.
 - B. Those owned and administered by the state.
- III. The present system in the United States is that of private ownership and operation subject to state and federal control.
 - A. Control is effected
 1. By the Interstate Commerce Commission.
 2. By the state commissions.
- IV. The question under discussion is whether government ownership would be preferable to the present method of control.

AFFIRMATIVE

The Affirmative is in favor of government ownership as the solution of our railroad problem, for

I. The present system of private ownership and government control has resulted in serious abuses.

A. Power and wealth have been concentrated in the hands of a few.

1. The railroad business is fast becoming a monopoly.

2. Large private fortunes have been built up by the few at the expense of the many.

B. The roads are greatly overcapitalized.

1. Rates must be kept up to pay dividends on watered stock. 41

C. Rates are high and fluctuating, and discriminations are numerous.

1. Certain persons and communities are favored at the expense of others. 49

2. Rates change frequently because of competition and rate wars.

D. Much unnecessary waste exists.

1. Lines are duplicated.

2. In advertising, efforts to obtain business, to influence legislation, in duplication of officials, and in passes.

E. The railroads have failed to respond to the needs of the country.

1. Transportation facilities are not provided where needed.

2. Little attention is paid to the demands of safety and convenience.

3. Earning capacity is the prime consideration.

II. Government ownership will be an effective remedy for these abuses.

A. The benefits of monopoly will be secured with none of its dangers.

1. The postoffice is now administered with justice for all.
- B. Rates would be stable and uniform to all.
 1. Freights and fares would be reduced.
 2. There would be no necessity for discriminations.
 3. The present causes for fluctuations in rates would be removed.
- C. The present wastes in management would be eliminated.
 1. By the consolidation of roads, offices, and staffs.
 2. By reduction of the number of attorneys, brokers, commission men, and traffic officials now needed to protect the railroads in the courts and secure business.
- D. Equipment and service would be greatly improved.
 1. Sufficient cars and lines would be provided to supply the needs of commerce in all parts of the country.
 2. The demands of public in regard to safety devices and conveniences of travel would be heeded.
- E. Other abuses would be remedied.
 1. Public life would be purified of the corrupting influence of the railroads in politics.
 2. Legislation and litigation in the courts would be greatly simplified.
 3. Stock-gambling would be reduced.
- III. Government ownership would be advisable for other reasons.
 - A. The conditions of railroad employees would be improved.
 - B. Public welfare would be largely increased.
 1. Government ownership would tend to steady industrial development.
 2. Strikes would be largely eliminated.

3. The benefits of travel would be brought within the reach of a greater number than at present.
- IV. Government ownership is practicable.
- A. The railroad is properly a function of government.
 1. It can be operated under private ownership only by means of a franchise from the government.
 - B. The United States government has the power to purchase and operate railways.
 1. It has already done so, successfully, in the case of the Panama railway.
 - C. The purchase can easily be brought about.
 1. Such purchase will work no hardship to the owners of the railroad stocks and bonds.
 2. Government bonds can be issued to cover the existing stocks and bonds.
 3. The revenue will be sufficient to cover all expenses, improvements, interest on bonds and still provide a sinking fund for the retirement of the bonds.
 4. The value of the railroad properties will be greatly increased as a result of government ownership.
- V. Government ownership has been successful where it has been tried.
- A. It has succeeded in Prussia.
 1. Equipment and service have vastly improved, and passenger and freight traffic have more than doubled.
 2. Fares and freights are steadily reduced and the railroads are a success financially.
 3. The roads have responded to the needs of the country.
 - B. In Switzerland.
 1. The conditions of the railway employees have greatly improved.

2. Service has improved, and rates are low and uniform to all.
3. The statement that the Swiss railways are unsuccessful financially is untrue.
- C. In Australia and New Zealand.
 1. Australian railways show a lower percentage of operating expense, accidents, and cost of construction per mile than the United States, while its revenue per train-mile is higher.
 2. New Zealand railways have been conducted primarily to meet the needs of the country and not to make profits.
 - a. Fares are low.
 - b. Employees are well-paid and well-cared for.

NEGATIVE

The Negative is not in favor of government ownership as a solution of our railroad problem, for

I. It is unnecessary.

- A. The present system of private ownership and government control is excellent.
 1. To it more than to any other one factor is due our present prosperity.
 2. Our transportation facilities are the best in the world.
 - a. Trains are run a greater number of miles annually in proportion to population, and at greater speed.
 - b. Transportation is cheaper.
 - 1' Freight rates have steadily declined.
 - 2' In proportion to population and the quality of the service, passenger fares are the lowest in existence.
 - c. The roads have adapted themselves to the needs of the country.
 - 1' New localities have received facilities even when unremunerative.

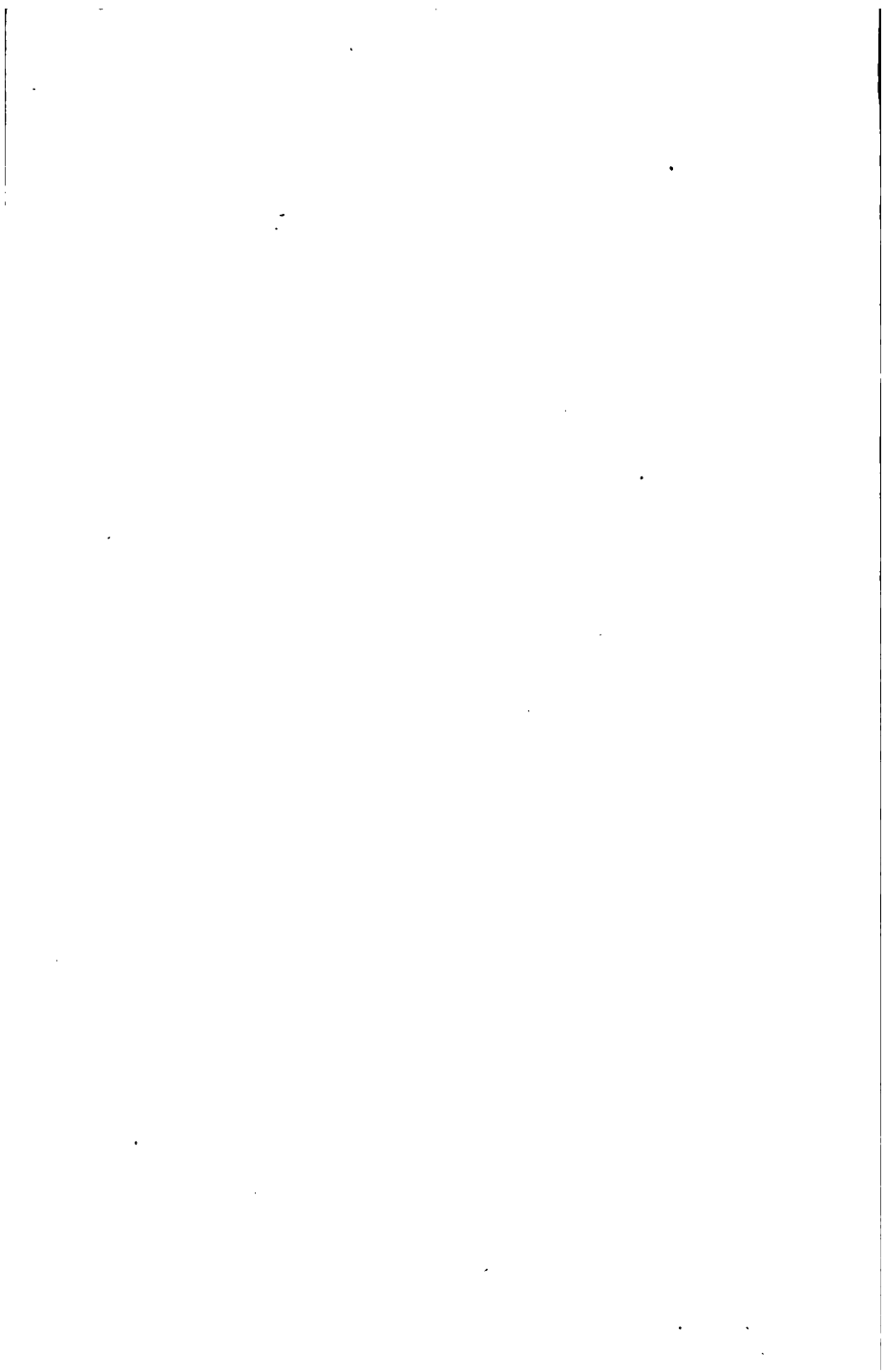
3. Overcapitalization is no longer generally true of our railroad system.
 - a. The original cash cost does not begin to cover the final cash cost in their present condition.
- B. Many of the former abuses of our railroad system no longer exist.
 1. They originated under circumstances then well-nigh unavoidable.
 2. Time will cure most of the remaining evils.
 3. Our railroad managers are now cooperating with the government to remedy them.
- II. That rates are unreasonable and discriminating is no longer true.
 - A. Present rates are reasonable.
 1. Since the Interstate Commerce law has been in force, rates have steadily declined.
 2. Few complaints have been received concerning unreasonably high rates, and most of these were groundless.
 - B. Existing remedies are ample to prohibit unreasonable discriminations between individuals and localities.
 1. Present laws can be enforced.
 2. Legalized pooling would help to eliminate such discriminations.
 - C. Some discrimination is reasonable and necessary.
 1. In the classification of freights.
 2. Between localities, in order to build up new industries and to develop natural resources.
- III. Government ownership would be unadvisable for other reasons.
 - A. The government should not engage in industrial undertakings.
 1. Popular sovereignty is not fitted for such enterprises.

- 2. Its present duties are already too numerous.
- B. Administration of the roads would be inefficient and extravagant.
 - 1. Similar enterprises where undertaken by the government have not been administered economically. ✓
 - 2. The quality of the service and the equipment would be allowed to deteriorate.
 - 3. Our civil service is notoriously inefficient. 7
- C. Government rate-making would be unsatisfactory.
 - 1. Discriminations would still exist. 141
 - a. Rebates and frauds can be brought about more easily under public than under private management.
 - 2. Rates would tend to rise rather than to decline.
 - a. Competition would be absent.
 - b. The roads would be compelled to raise wages, improve equipment and service, and at the same time, to make profits.
 - 3. Government rate-making would be too rigid.
 - a. It would tend to arrest commercial progress.
 - 4. Rate-making is too complex a matter to be left in the hands of politicians.
 - a. The government could not pay the large salaries now paid to the trained railway officials, and consequently could not secure the best men.

- 3 ~~2~~ ①
- Government management would not respond readily to the needs of industry.
 - 1. Legislation is always slow and liable to political influence.
 - 2. Populous and prosperous communities would receive facilities at the expense of newer and poorer communities.
 - 3. Claims against the government are difficult to collect.

- E. Government ownership would be dangerous politically.
- 156 1. An enormous army of employes would be at the disposal of the party in power.
- F. The government is not a good employer of labor.
 - 1. It is arbitrary and unreliable.
 - 2. Wages would not keep pace with the cost of living.
- IV. Government ownership would be unwise for fiscal reasons.
 - A. The purchase of the roads alone presents difficulties well-nigh insurmountable.
 - 1. The government would have to pay more than the roads were worth.
 - 172 2. The national debt would be increased beyond all reason.
 - a. The solvency of the government would be imperilled.
 - 3. There would be great opposition to the issue of bonds for such purchase.
 - B. The budget of the government would be thrown out of gear.
 - 1. The revenues and expenditures of the roads would be so much larger than the rest of the budget.
 - 2. A shrinkage in railroad receipts would cause financial embarrassment, and upset our taxing methods.
 - C. Bankrupt and unprofitable lines could not be re-organized but would remain a burden on the government.
- V. Government ownership has only partially succeeded wherever it has been tried.
 - A. It has failed in many respects in Prussia.
 - 1. Facilities and equipment are not as good as in the United States.
 - 2. Freight rates are higher.

3. Facilities have not been afforded equally, and industry has been restricted.
4. Conditions in Prussia are entirely different from those in the United States.
 - a. Conditions of population and traffic are different.
 - b. The government of Prussia is bureaucratic and administrative, while ours is legislative and parliamentary.
 - c. The civil service is efficient and the country is practically developed.
- B. Government ownership is far from successful in Belgium.
 1. Healthful competition has been stopped.
 2. The equipment is inadequate.
 3. Red tape abounds and the management is inefficient.
- C. In Switzerland.
 1. After ten years the roads show a deficit.
 2. Conditions are unlike ~~those in the United States.~~
- D. In Australia and New Zealand.



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SELECTED ARTICLES ON GOVERNMENT OWNERSHIP OF RAILROADS

INTRODUCTION

Transportation is essentially a public service, and wherever railroads have been built, we find that upon the government has devolved the obligation of rendering aid in their construction and of supervising or regulating their management and operation. The character of such aid and regulation varies considerably with different countries. In some cases, public aid has been limited to the granting of the right of eminent domain in order to enable the railroads to secure the necessary right of way. More often, however, governments have supplemented such assistance by the purchase of railway stocks and bonds, by the loan and donation of public lands and funds, by guaranteeing to private investors a fixed minimum return on their investments, and by engaging directly in the construction of roads.

Regulation of the railroads has varied as widely as the nature of the aid rendered by the government. In some cases, it has been limited to the barest supervision, the aim being to leave private capital as unrestricted as possible. This was the *laissez-faire* policy originally followed in the United States, and which has gradually given way to increasingly strict regulation. Most countries where private ownership prevails provide for thorough and detailed regulation, and in many cases, the roads are owned and operated directly by the government.

In the United States, the railroads were constructed largely by private enterprise, although public aid was very generous. States, counties, municipalities, and later the national government, rendered assistance in the shape of grants of land, loans or donations from the public funds, and also in the building of roads. Construction was pushed rapidly and even recklessly, and the necessary safeguards were not placed around the public funds. The result was that many of the roads failed to be remunerative, and became bankrupt, the states were forced to sell the roads to private investors or in some cases to repudiate their debts, and local investors lost a large part of their stocks and bonds to the benefit of Eastern capitalists who were able to take over the roads.

Up to this time government supervision had been of the simplest sort, but now the antagonism of the local farmers and business men against the owners of the railroads, and the gross discriminations practised by the roads against some individuals and localities in favor of others, resulted in a demand for thorough regulation.

In this matter, the states preceded the federal government by some years, and the form of regulation most generally adopted was the commission. These state commissions were formerly of two types, the supervisory and the mandatory. The supervisory commission was the first to appear, and was employed in Massachusetts, Pennsylvania and other Eastern states. It had the power only to investigate railroad practices and to report its findings to the legislature and to the people. It might also make suggestions as to future legislation to be adopted. The mandatory commission, adopted in the West and South, had not only the power to investigate and report, but also to issue orders to the railways and to enforce its orders by judicial procedure. Among the powers of this type of commission was that of prescribing maximum charges and of fixing rate schedules. Both these types are gradually giving way to a

newer form, the public utilities commission. This type of commission has mandatory powers, but its scope is extended to include other public utilities as well as railroads. For example, the Pennsylvania commission has jurisdiction over twenty-seven classes of corporations, including, among others, railroads, canals, street railways, telegraph, telephone, gas and water companies. At the present time, twenty-two states have this type of commission, eighteen states have the mandatory type of railroad commission, and the advisory form has been given up. Four states have a corporations commission and four are without a commission of any kind.

The first legislation to be passed by Congress for national regulation of railroads was the Interstate Commerce Law of 1887. This law has never been repealed, but has remained in force to the present time, and has been strengthened from time to time by amendatory acts. This law originally provided for the establishment of the Interstate Commerce Commission—a commission of seven members and of the mandatory type. This Commission now has jurisdiction over railroads, express and sleeping-car companies, and telegraph, telephone and cable companies, and among its powers are those to adjust rates, to prescribe methods of accounting, to investigate complaints and to make investigations upon its own motion, and to carry on proceedings to enforce its orders. The law also prescribes the powers of the Commission with respect to unreasonable discriminations between individuals and places, pooling, and higher charges for shorter than for longer hauls over the same lines.

Although government regulation of railroads has become increasingly stringent and thorough, there is a demand that the roads be purchased and operated by the national government. The United States already owns and has operated successfully two railroad systems in connection with the building of the Panama Canal, and a bill has now been passed, authorizing the government to construct not more

than one thousand miles of railway to connect the coal fields of Alaska with the Pacific harbors. Before taking up the discussion in the following pages, the student is recommended to familiarize himself with the history and present status of the railroads in the United States and other countries. A very helpful and concise account will be found in Emory R. Johnson's "American Railway Transportation," Part IV, also in the article on "Railways and Railway Problems" in the New Encyclopædia of Social Reform. Other helpful material is listed in the bibliography which forms a part of this book.

GENERAL DISCUSSION

Harper's Magazine. 73: 250-7. July, 1886.

Social Studies: Nature of the Railway Problem.

Richard T. Ely.

What is a primary condition of the widespread, far-reaching division of labor which is the first feature of modern production to attract attention? Is it not the improved means of communication and transportation which the inventions and discoveries of our century have placed at our service? Undoubtedly the endless exchanges which are part and parcel of our vast system of production require a large market. Production, as has already been stated, is not carried on for one's self. But this is not all. It is largely not carried on for one's own neighborhood.

Gloversville, New York, manufactures gloves for all parts of the United States, but it is doubtful if one-thousandth part of the product of this industry is consumed in the town and its immediate environs. Westfield, Massachusetts, manufactures whips in like manner for the United States, and a few towns like Waltham and Elgin supply us with nearly all our watches. When Adam Smith wrote his *Wealth of Nations*, one hundred years ago, he assured the English farmers that they had no reason to be alarmed at his advocacy of free trade, because Irish beef was too remote ever to become a serious competitor in the English markets with English beef, as some had evidently feared. New beef slaughtered and dressed in Chicago is eaten fresh in Baltimore and New York, and the English cattle-grower views with indignation the incursions of American beef on the English market. The railroad thus becomes a factor in every step of production, and this so generally that it should be difficult to go into a New York market or a New York shop

and pick out one single article in the price of which charges for the use of the railway did not form an element.

We discover thus a universal dependence on the railway. Does the reader remind me of other means of communication and transportation? The reply is evident on a moment's reflection. It is a law of political economy that the more perfect highway at once steps into the position of a monopolist with reference to inferior highways. But it needs no law of political economy to teach the farmer or the merchant that for most purposes he must use the railway, or entirely abandon his attempt to gain a livelihood; and when, as happened formerly more frequently than now, he was told, if not satisfied with the treatment he received, to build himself a railway, or to take himself to the ordinary wagon road, his only satisfaction lay in calling his tormentor—and that very truthfully—a fool or a knave.

It thus becomes already plain that railways have perverted that normal and healthful dependence of man upon man which leads to the formation of the fraternal commonwealth—a commonwealth of equal rights and privileges such as our fathers aspired to found. Equal and free contract between the owner of twenty acres and a Vanderbilt or Gould who controls the sole avenue to the market for the produce of the humble farmer! What a simulacrum! And I care not if we substitute for the small farmer the owner of a thousand acres, or a merchant with a hundred thousand in capital, or the manufacturer with five hundred employees. There is still no guarantee of fair treatment.

The first consideration, then, to be borne in mind in any attempt to understand the nature of the railway problem is this: the railways must become still more completely our masters, or they must be reduced to complete subjection to us as their masters; there is no middle ground. We are dealing with the problem of economic liberty.

The history of trades and manufactures in the last four hundred years may be roughly divided into two periods. The first, called the period of restriction, is the era of guilds and corporations. One primary object of the ancient production

in guilds was to secure excellence of work, and cities like Nuremberg in Germany to-day bear witness to the high standard attained; but when the good of the few was placed above the general good, and men were for purely selfish reasons refused entrance to the bodies of craftsmen who alone could carry on trades and manufactures, the time for the dissolution of the order had arrived. Inventions and discoveries leading to production on a vast scale hastened the fall of privilege. In France it required a terrible revolution to usher in the new era of industrial equality, and in other countries the contest has been long and obstinate. This new era we call the period of freedom in trades and manufactures. Its attainment has been regarded by economists and historians as one of the greatest achievements of modern times; but while the jubilation over this advance is still being echoed and reëchoed, a new period of restriction has been growing up, and that without the justification that it meets any special requirement of our times. The railway power is building up a class of privileged favorites in every quarter. There are men who have received special rates—and no great American city is without them—and who have been able to conquer in the competitive struggle for existence their unequally matched foes. The avenue to success in business thus lies through the grace of a manager of a public highway, for such is the railway. And the insolence of wealth which disgusts and oppresses us is perhaps found oftenest in these newly acquired and illegitimate fortunes. The old guild-master said to the applicant for admission: "No; we are already so full that our means of livelihood might be endangered by fresh competition. We must protect ourselves." But no guilds and no laws of the Middle Ages did or could confer such outrageous privileges as the great railway magnates of this country once bestowed upon a private corporation, namely, the South Improvement Company, the infamous predecessor of the well-known Standard Oil Company. Here are the words of its special agreement with the Central, Lake Shore, Erie, and Pennsylvania railways. These corporations pledged themselves at all times

to coöperate as far as it [namely, the party of the second part] legally may with the party hereto of the first part [the South Improvement Company] to maintain the business of the party hereto of the first part against loss or injury by competition, to the end that the party hereto of the first part may keep up a remunerative and so a full and regular business, and to that end shall lower or raise the gross rates of transportation over its railroads and connections as far as it legally may, for such times and to such extent as may be necessary to overcome such competition. The rebates and drawbacks to the party of the first part to be varied *pari passu* with the gross rates." The Standard Oil Company has entered into like agreements with railway corporations, and it has been authoritatively stated that it once received ten millions of dollars in rebates in eighteen months! Is it, then, any wonder that it has crushed out competition and smothered honest industry?

The student of the nature of the railway problem must next notice that we have to do in this with the problem of political liberty. Economic power carries with it political power. Sooner or later those who control the avenues to material well-being control the State, as matters are with us. We are not dealing with the question what ought to be, but what is and will be. Our great Hamilton well said, "A power over a man's subsistence amounts to a power over his will." It is also implied in such common assertions of every-day life as that the member of a family who carries the purse will rule the house. Now the railways represent the largest aggregations of wealth, and exercise a controlling influence in economic life. The consequences just described as inevitable have followed surely and swiftly. The King of Belgium long ago remarked that, as far as real power was concerned, he should prefer the position of president of the united Belgian railways to that he then occupied; and he spoke with a clear perception of the nature of the preponderating influences of the railway.

The political power of the railway corporations in the United States is a matter as well known as is the corruption

by which it has been acquired. The State of Pennsylvania has long been regarded as the special property of the Pennsylvania Railway corporation to such an extent that, in ordinary conversation in that commonwealth, any endeavor to obtain justice in opposition to the will of that potential body is discouraged as useless; while the Supreme Court of Pennsylvania once renowned for intelligence and integrity, is now a by-word and a reproach and an author of a legal work finds it necessary to warn his students not to attach weight to its decisions, as it is a tool of corporations. The Supreme Court of the United States includes two judges who are regarded as railway judges. The Senate of the United States has become the stronghold of the great corporations, estimates having been made that even one-fourth of its members are railway representatives. In Ohio you learn that the Standard Oil Company, a creature of the railways, controls the Legislature in opposition to the interests of the people. Nor do even our municipalities escape this malign influence. When the election of the fall of 1885 was held in Baltimore, word was sent to one of the leading politicians, who hoped to obtain a municipal office, in his campaign utterances to be sure not to touch on the subject of railways. This is the condition to which our railway kings have brought us. They are kings in very truth, and we are their subjects, to whom the right of free speech and of an independent press is denied. We read of an earlier period when America was proud of the sturdy honesty, the manly intrepidity, and the vigorous independence of her citizens. Is this passing away? In the testimony given before the Senate Committee of 1883 on Labor and Capital, one witness spoke of the subserviency of American-born laborers as a well-known fact, and no contradiction has appeared. The Germans have a forcible expression to indicate this, namely, *Hundedemuth*, the humility of a dog. Can it be that this is a characteristic of the descendants of a generation which knew Washington, Hamilton, Jefferson, and Patrick Henry, and that long line of Revolutionary heroes? Indeed, it is impossible. Our subjection will not

endure forever. Our labor organizations are a pledge that it will not; and for this cause, if for no other, we may rejoice in their might.

The railway problem is the problem of labor. No other single person, natural or artificial, employs so many men as the great railway corporation.

This employment influences labor in other channels both directly and indirectly. It has more power than resides elsewhere to depress wages, to extend the hours of labor, and to subject it in other respects to abuse. Its influence for good or evil on the laboring classes exceeds any other in the United States. It might set an example in regard to kindly treatment, satisfactory tenure of office, fair wages, and wholesome environment for health of mind and body, which would speedily lead to an elevation of labor. But it is not merely as an example that the railway problem is the problem of labor. It is in many branches interested in production, and its reduction of wages will often force a reduction even upon competitors who desire to do the very best for labor. It is an unfortunate feature of our competitive economic system that meannesses are forced upon the well-meaning, and thus an ascendancy is frequently given to the worst elements in industrial society. An illustration of this may again be taken from that rich storehouse of facts furnished us by Hudson. The anthracite coal combination of Pennsylvania, one of the most remarkable monopolies in the United States, comprises six railways, which own 195,000 acres of anthracite coal land out of a total 270,000 acres. Not satisfied with its oppression of the consumer, it presses with remorseless weight on the agents of production, the miners. It appears that private mine owners, after a strike of some weeks' duration, had decided to advance the wages of this wretched class; but the railways, fearing the effect on their own laborers, trebled the freight rates of these men! Thus was the matter decided against the unhappy toiler.

Again, those who do not receive special rates and rebates from the railways work at such disadvantage that at

times the alternative is a cut in wages or failure in business. This is a consideration which is too often overlooked in the labor movement. Many a business man, who is pressed on the one side by the railway power and on the other by the labor power, must feel that he is ground between the upper and the nether millstone, and must be ready to welcome even socialism or any other radical reconstruction which will show him a chance of escape from the torments of business. Occasionally such a poor wretch will conclude that life is not worth living, and will put an end to his own existence.

The railway problem is the problem of coöperation and other reforms in economic life. Until those engaged in these efforts know that they can depend upon just and equitable treatment in transportation, their success will at best be but imperfect and incomplete.

The railway problem is the problem of legitimate business enterprise. John Stuart Mill, in his *Political Economy*, states forcibly that there is only one power absolutely fatal to economic progress, and that is the persistent, omnipresent oppression of a government like that of Turkey. A certain amount of inequality of taxation, certain irregularities in justice, occasional failures to repress violence—all these have been witnessed in countries rapidly progressing in wealth. Had he written in our day in America, he would have added the railway power as one which might crush enterprise. It is omnipresent. More than that: it is near the starting-point of production, and it may cut off activity at its fountain-head. You may draw off large quantities from a stream, when you approach its mouth, without affecting its mighty onward flow, whereas it can easily be diverted or dammed near its source. Transportation is an economic basis of modern production.

The railway problem is the problem of legitimate investment in the means of transportation and communication. Who now knows what he is doing in buying railway stocks or bonds? The general public does not, but managers do. Railway stocks rise and railway stocks decline, generous

railway dividends are poured into the lap of the smiling share-holder, dividends are passed altogether, prosperity and adversity in the railway world play at hide-and-seek, and amid it all the accumulations of the managers go on, until the world stares in wonder at the most monstrous fortunes of the century, and fifty men own an appreciable share of the wealth of the country.

Once more: the railway problem is the problem of the management of a large share of our national resources. Estimates such as we have are little better than shrewd guesses; but if we put the wealth of the country at forty thousand millions, and the valuation of railways at five thousand millions, and say that they represent an eighth part of our resources, we shall have a moderate estimate. A large part of the remaining wealth of the country has a direct connection with railways. Reference is made to property like rolling-mills, coal-mines, car-shops, and locomotive-works. Now the management of this wealth is a matter of vital concern to the country. Ask the most conservative political economist why the institution of private property ought to exist, and he will tell you that it is not an end in itself, but only a means to an end, which end is the welfare of the people. Private property is allowed to exist because it is thought that thus will the good of mankind be most effectively promoted. We have then to inquire how this trust is administered. Does it really justify its creation? Does it in the most effectual manner perform its proper function? It is thus seen that the management of this vast property is a matter of vital concern to the public; it is the proper concern of the public; and we reach this conclusion: the railway problem is the problem of the management of a very large portion of our national resources.

But why should I continue? The nature of the problem with which we have to deal must now be clear to the reader. It is the problem of problems. It is the starting-point of all social reforms. The tariff, coöperation, strikes, arbitration, profit-sharing—all these are weighty topics, but they

wellnigh lose their significance when placed by the side of the proper regulation, control, and ownership of our chief means of communication and transportation. Other reforms must wait on the establishment among us of satisfactorily managed highways. We desire an incorruptible civil administration: railroads can defeat our efforts to attain this. We desire a reform in the tariff: railways can render tariff laws nugatory. We desire an impartial judiciary: railways can corrupt our judges, and can take from the service of the people into their own employ those who as judges refuse to serve their purposes. A pure legislature is desired; but railways defile its purity. A better government of cities is a crying need of the hour; but in one city a great railway corporation ranges itself against reform and defeats it, while in another the officers of a street railway are under investigation for corruption of aldermen, theft, and mismanagement, and honest men long to see more than one railway man hard at work in striped garments within prison walls.

In short, the abuses which have given rise to the problem of the railway are germinal in character. They drag their slimy length over our country, and every turn in their progress is marked by a progeny of evils.

Quarterly Review. 211: 333-66. October, 1909.

Nationalisation of British Railways. Edgar Crammond.

The railways of the world may be roughly divided into two groups, namely, (a) those which are owned and administered by companies; and (b) those which are owned and administered by the state. There are upwards of 560,000 miles of railway in operation at the present time; and of this total approximately 390,000 miles are owned and worked by companies, the balance of 170,000 miles being under state administration. It will perhaps be a matter of surprise to many people to learn that more than two-thirds of the railway mileage of the world is still owned by companies, but

it is only fair to point out that of these two-thirds the United States of America account for about 225,000 miles; so that, apart from America, the mileage of the state-owned railways approximates to that of the privately-owned lines.

Anglo-Saxon communities, as a whole, have not shown any great predilection for the public ownership of railways; but most of our self-governing colonies have been compelled, principally from economic causes, to adopt this policy, and it is to them that we must look for illustrations of the manner in which men of our own temperament and traditions have solved, or attempted to solve, some of the great difficulties which beset this branch of state administration.

The principle of the public ownership of railways has received its widest practical application on the continent of Europe; but even here government railways are by no means universal. The mileage of railways in operation in Europe (apart from the United Kingdom) is about 165,000 miles; and of this total state railways account for about 87,000 miles, the remainder being in the hands of companies.

At the present time there are six State railway systems in Germany, exclusive of the Imperial railways (Alsace-Lorraine), the most important system being of course that of Prussia.

Cassier's. 35: 288-95. December, 1908.

Nationalization of Railways: Practical Workings of State Ownership in Various Countries. C. S. Vesey-Brown.

Forty-three of the separately governed countries of the world have decided in favour of state ownership. They are as follows:

British India, Canada (a portion only), the Australian Commonwealth (six separate colonies), New Zealand, the four South African colonies, Austria-Hungary, Belgium, Brazil (a portion only), Bulgaria (a portion only), Chili, Columbia, Costa Rica, Cuba, Denmark (a portion only), France

(a portion only), the German Empire, Greece, Holland, Honduras, Italy, Japan, Luxemburg, Newfoundland, Nicaragua, Norway, Portugal, Roumania, Russia (a portion only), Servia, Siam, Spain, Sweden, Switzerland, and Turkey (Asiatic). In some cases, as is indicated in this list, a portion only of some of these countries' railway system is under the control of the state.

Political, strategical, and financial considerations have been the principal factors which have influenced the state to retain control of the railway systems. Great military powers like Germany, Russia, Italy, the Indian Government, etc., must of necessity be in a position at any moment to control the traffic on the main arteries of the railway systems which connect the principal centers of commercial activity with the boundaries of the country. To be able to ship troops and war material along these lines without consideration as to ownership, rates, etc., is a *sine quâ non* where interests of great importance are at stake, and it is therefore essential that the responsible governing authority should in times of peace make every provision for this eventuality, whether the necessity to do so arises with a neighbouring power or from internal dissension.

The inefficient services in some countries by private enterprise have also contributed to the nationalization of railways, while a further reason for this step has been the undoubted difficulty of raising capital from private sources wherewith to construct the track, etc. Take the example of the Australian colonies: It is doubtful if the railway system would have grown to the extent it has done if the capital for the railways had had to be raised for railway purposes alone; but with the credit which the separate governments can pledge as collateral security for the payment of interest and the power of taxation possessed by each state, it has been possible to raise the very large sums which are represented in the capitalized value of the railways in Australasia.

The necessity to "foster" the staple industries of some countries by the extension of railway facilities is another

reason for state ownership, such as, for example, in Belgium and Norway, where there are numerous *lignes vicinales* in connection with the main lines. Examples of purely strategic lines are the Russo-Siberian and the Hedjaz (Asiatic Turkey) railways.

The general principle that railway traffic should be carried out under statutory authority is accepted by all, but in the application of the principle there is considerable divergence of practice. In Great Britain, the United States, Argentine Republic, Canada, Brazil, and Mexico (the three latter, with slight exceptions, noted hereafter), Rhodesia, Egypt, and Spain, the state has granted permission, under statutory obligations, to private enterprise to construct and work railways. In Great Britain the franchise is burdened with the costly process of land purchase, but in other countries the concessionaires of the railways have always been endowed in the first instance with more land for the railway track and its appurtenances than was absolutely necessary, but of recent years increase of traffic, population, and the value of land have now somewhat curtailed these privileges.

The countries where nationalization has been carried out may be broadly divided into three classes, viz., those where:—

(1) Railways are entirely owned and operated by the state;

(2) Railways are owned by the state and operated by private enterprise, and

(3) Railways where state aid towards construction or operation has been given.

In the first class are:—

British India.

Canada (a portion only).

Australia Commonwealth (six colonies).

New Zealand.

South African colonies (four).

Austria.

Belgium.
Brazil (a portion only).
Bulgaria (a portion only).
Chili.
Colombia.
Costa Rica.
Cuba.
Denmark (a portion only).
France (a portion only).
German Empire.
Hungary.
Honduras.
Italy.
Japan (process of ownership not quite completed).
Norway.
Portugal.
Roumania.
Russia (a portion only).
Servia.
Siam.
Sweden.
Switzerland (process of ownership not quite completed).
In the second class are:—
Newfoundland, Holland, Nicaragua, Brazil, and Bulgaria.
In the third class are:—
Denmark, France, Greece, Luxemburg, Russia (a portion only), and Spain.

Taking each class by itself, it is interesting to note the different characteristics belonging to the particular country under review. In India the railway system owes its inception to the guarantees given to private enterprise by the British Government for strategical and commercial purposes. The Indian Government now owns all the lines on British territory, having purchased the last of the guaranteed lines in 1906. The majority of the native state railways outside the above are owned by the native chieftains and their governments, and leased to companies mostly financed with British capital. On the Indian state railways the rates of car-


riage for passengers and goods traffic are very low; in many instances third-class passengers can travel five miles for one penny.

The Canadian systems of state-owned railways are due to the action of the Nova Scotian Government in building a line from Halifax to the Bay of Fundy in 1858. Extensions to this line and the building of the Prince Edward Island Railway (261 miles) were all included as part of the property of the Canadian Federation in 1867, the latter province being admitted to the confederation in 1874. Since 1901 the Canadian Government has constructed a state line in Ontario. The principal railway traffic in Canada is, however, in the hands of the Canadian Pacific and Grand Trunk Railway Companies and their allied lines, which, in most cases, enjoy a government subsidy to assist in opening up the country.

The Australian colonies and New Zealand own and operate practically the whole of the railways in each colony. There are a few privately owned steam railways and tramways, but these are purely local. The particulars as to length of line, etc., are given in the table. It is obvious that the rapid growth of the railways in the different colonies is to keep pace with the development of farming lands and the settlement of colonists.

In the South African colonies, since the last Boer war, the railways have passed practically entirely into the hands of the government. This does not, of course, apply to Rhodesia, where the railway companies are guaranteed interest and practically controlled by the Chartered British South Africa Company.

The great European nations of Russia, Germany, Austria-Hungary, and Italy have practically nationalized the whole of the railway systems within their borders. In Russia there are still approximately 12,700 miles out of a total of 39,418 miles which are managed or leased to private companies on certain concessions, but out of a total capital of about £107,000,000 which these 12,700 miles represent, the government guarantees the interest on no less than £93,000,000,



which means that practically the government is the owner of the lines. The nationalization of Russian railways commenced in 1881, and has been gradually extended, so that now the state directly controls the enormous total of over 28,000 miles of line and has incurred liabilities on capital account of over £401,000,000.

Prior to the Franco-German war the railways in the different states forming the German Empire were in the hands of private companies. Since 1880 the process of acquisition of these lines by the state has been rapid, and by 1904 all the railways in Prussia, Saxony, Hesse, Bavaria, Wurtemberg, Baden, Oldenburg, Mecklenburg, together with the lines in Alsace and Lorraine, were entirely owned and operated by the German state railway department. The Grand Duchy of Luxemburg is not included in the above, as by an agreement made in 1902 the lines passed under the direct control of the German government, and by 1959, on completion of a series of payments, the whole line will then become the property of the German state railway administration.

In Austria and Hungary the government commenced in 1876 acquiring such railways as were constructed by private enterprises prior to this date, and by the end of 1905 the whole of the railway system in the country had passed into the direct ownership and control of the government.

In Italy the railway administration has suffered various vicissitudes. In 1906 the whole of the lines passed into the control and direction of the state on certain terms of purchase, which include an annual rental to the existing shareholders for sixty years, after which the government is the absolute owner of the railway system. The results of nationalization have not yet been felt from the point of view of relief to taxation, but the enormous industrial developments of Northern Italy, the application of electrical traction supplied through the agency of the numerous hydro-electric power stations (for which Italy is becoming famous), are the factors which will tend to help in the reformation of what was at one time a notoriously badly managed railway system.

The Belgian Government commenced in 1857 to acquire railways, and, at the end of 1905, owned or controlled 2,490 miles.

The ownership of railways in Norway is curiously divided. There are three classes:—

- (a) Entirely owned and controlled by the state;
- (b) Owned by the state and the communes through which the lines pass, and by private persons, and the whole worked by the state; and,
- (c) Entirely private railways subsidized by the state.

In the first class, the state has contributed the cost of building the lines, but the local authorities through whose districts the lines run have had to provide the land, so that in reality the state and the communes are joint owners; the latter, it is assumed, deriving an indirect benefit from the existence of the railway and rates levied for goods and passengers.

In the second class, which includes the main line, the government has provided by far the largest portion of the capital, but, in order to attract capital, have agreed that local authorities and private persons may be directly interested in the capital expenditure and the net profits due to working, though it is assumed that they have no control over the state department which operates the traffic. In no case does the interest exceed 4 per cent. on the ordinary share capital, nor is the private capital so invested large, being roughly 10 per cent. on the total amount expended.

The Portuguese State Railway system is not a large one, as can be readily understood, and has only increased from 105 miles in 1869 to 540 miles in 1905.

The Servian State Railways had their inception as the result of the famous Berlin treaty of 1878. In addition to the ordinary standard-gauge lines, the government has constructed a large number of "light railways" of narrow gauge, which are to be opened in 1909.

The Swedish Government is the direct owner of 2,609 miles of line, of which over four-fifths have been constructed by the state.

The railway system in France is in a curious tangle. The government owns and operates one line about 1,812 miles long (district of Chartres, Nantes and Bordeaux), but it is unable to give through tariffs to Paris from these districts (except in very exceptional instances), owing to the competitive and state subsidies which the competing lines of the Orleans and the Ouest Railway Companies enjoy. The most extraordinary circumstances to be noted in this respect is the fact that, though the state owns and operates this particular line, its operations are stifled by a state-subsidized competitor. It would require more space than is at the disposal of this article to give a history of the position at various dates of the railways in France, but the whole question was settled in 1883 after many vicissitudes, on the following basis:—

The state was to resume possession of the whole railway system, rolling stock, etc., etc., at various dates between 1950 and 1960, and in the meantime the net profit each year was to be divided into:—

(1) the necessary amounts for mortgage bonds, debentures, etc., advanced by the state:

(2) A fixed dividend on the share capital; and

(3) A sinking fund to redeem the share capital.

If the net profit was insufficient to meet these charges, the state provided the difference. If in any year there was a surplus, then it went to the state under certain conditions.

The Swiss Government was authorized by direct mandate in 1898 from the public to acquire the whole of the main railway systems (five in number). The purchase price amounted to £12,000,000 sterling for four of the lines, and the fifth (St. Gothard) will be purchased in 1909. The improvements in rolling stock, service, and general personnel on the Swiss Railways since the government took charge are obvious to those who have had experience before and after the change of ownership.

Turning to the American continent one finds that in Brazil, Chili, Costa Rica, and Colombia the state owns certain lengths of railway, which is, as a rule, administered at a loss, though the lengths of line and amounts so involved are

comparatively trifling compared with the other interests involved in these countries. No reliable data as to the lines in Honduras, Guatemala, and Nicaragua are obtainable.

No observations on the subject of nationalization would be complete without reference to Japan and Siam. The latter country has shown what can be done by careful attention to details. The Siamese Government has managed to build up a small railway system of 357 miles out of the ordinary revenues of the country, and, after allowance of 10 per cent. each year on the capital employed, as a reserve for depreciation, etc., the resultant profit pays 5.13 per cent. on the capital employed. It does not follow that this result will, however, be always obtained, as there is no doubt that with the development of commerce in Siam a demand will arise for cheaper freight tariffs, etc., etc., which will have the effect of increasing the ratio of working expenses to receipts, at present only 37 per cent.

Since the Russo-Japanese war, Japan has set itself the task of acquiring the railway system, which up to that time was practically owned by private enterprise. By an act passed in 1906 the government is to purchase all the lines scheduled in the act (2,812) before 1915 on payment at the rate of practically twenty years' purchase in government 5 per cent. bonds. When these lines have been acquired the government will own about 4,300 miles of railway. It is anticipated that the loans required for this purpose will be entirely redeemed by sinking funds in thirty-two years, and thereafter the country will benefit to the extent of about £5,500,000 sterling.

COUNTRY	Year.	Length Owned and Managed Lines.	Capital Owned and Managed Lines.	Total Revenue.	Working Expenses.	Ratio Exp. to Re.	Gross Profit	Profit After Interest Charges.	Remarks.
India (Lines in Brit. Terr.)	1905	20,722.15	252,196,195	22,855,231	10,889,612	47	11,965,619	2,320,142	
India (Lines of Net. States)	1905	2,776.18	8,133,900	796,932	387,146	48	409,786	.....
Canada	1906	1,444.92	16,699,072	1,571,232	1,558,505	99	12,727	.....
Ontario	1906	138	1,961,925	113,337	75,519	66	37,818	.....
New South Wales	1906	3,390	43,626,063	4,234,791	2,308,384	54	1,926,407	384,980	
Queensland	1906	3,137	23,821,980	1,534,870	863,356	56	671,524	209,890	
South Australia	1906	1,745%	13,610,520	1,349,765	764,385	56	585,380	.....
Tasmania	1906	462%	3,926,713	241,188	172,601	71	68,587	179,876	
Victoria	1906	3,398	41,388,299	3,787,619	1,999,023	52	1,788,594	316,507	
West Australia	1906	1,612	9,965,940	1,634,444	1,201,753	73	432,691	84,224	
New Zealand	1907	2,458	22,498,972	2,624,600	1,812,482	68	812,118	.....
Cape Colony	1906	3,074	30,642,453	3,772,770	2,981,350	79	791,420	.....
Natal	1906	1,023%	13,660,761	2,029,683	1,260,863	62	768,820	313,148	
Transvaal & Orange R. Col.	1906	.....	23,339,335	5,284,672	2,927,875	53	2,356,797	914,767	
Austria	1905	5,078%	111,791,005	12,224,367	9,247,716	75	2,976,651	.....
Hungary	1906	.....	100,883,487	11,843,073	7,477,622	63	4,365,451	.....
Belgium	1905	2,490	88,326,000	9,718,073	6,211,710	63	3,706,362	372,572	
Central Brazil Railway	1906	1,004	12,775,000	1,947,294	1,879,838	96	67,456	.....
Bulgaria	1905	780	6,598,664	444,976	302,528	68	142,448	.....
Chile	1906	1,592	8,400,000	1,240,952	1,417,510	114	Loss	.....
Denmark	1906	1,137	10,535,000	2,083,331	1,685,278	80	398,053	.....
Norway	1906	313	2,698,927	139,996	100,255	71	39,741	.....
France	1905	1,727	39,173,028	2,152,865	1,557,011	72	595,854	.....
Germany	1904	30,903	665,406,808	116,218,698	73,385,314	63	43,833,384	.....
Italy	1907	8,216	226,254,000	16,996,431	14,965,607	88	2,030,824	.....
Japan	1905	1,461.38	15,514,535	2,183,425	1,965,324	44	1,218,101	.....
Portugal	1905	540	7,758,000	576,000	329,000	58	247,000	.....
Roumania	1905	1,975	35,464,228	2,309,680	1,563,200	67	746,480	.....
Russia	1902	24,260	379,855,936	46,593,111	33,407,903	71	13,185,208	3,486,784	
Sweden	1905	2,609	26,299,769	3,007,822	2,160,414	71	847,404	.....
Switzerland	1905	.....	12,032,032	4,827,092	3,206,276	66	1,620,816	.....

£103,304 should be added to Revenue on Account of Expenditure on rolling stock charged to Working Exp. Included in Working Expenses is expenditure of £39,016 of a capital nature.

No cap. charges paid out of rev. profits paid into cons. rev.

£2,732 capital paid out of revenue. Sinking fund, £64,903.

In 1907 estimated deficit was £2,667.-424, all deficit made up by State. T1 capital repaid £10,837,238.

No statistics available to show any contributions to sinking fund.

Rate of exchange \$20 equals £11.

Profits generally equal to 3 or 4% on cost.

There are also 1,041 miles of railway that are worked by the State and owned by it together with communes and private persons. The capital cost amounts to £8,013,485.

Net revenue after meeting Government railway bonds is estimated at £186,000 or rather more than 2 1/2% on capital of £7,662,000.

At the end of 1904 mileage was 26,764 miles. Total capital expenditure £203,377,988.

In 1905 the amount paid to sinking fund was £208,437.

Annals of the American Academy. 19: 61-73. January, 1902.

Government Ownership of Railroads. Martin A. Knapp.

The object of this paper is merely to outline, without elaboration, some of the arguments for and against the public ownership of railroads.

For the government of the United States to acquire the two hundred thousand miles of railways already constructed, undertake to conduct their vast operations by direct agency and extend the service with needful rapidity, is a project of such colossal import as to incline us to place it quite outside the range of probability. Nevertheless, it cannot be put aside as a purely speculative problem, for already there are many ardent advocates of the policy. In the rapid advancement which displays itself on every hand, not only in the methods of industrial production but in the aims and aspirations of our people, no one can tell how soon we may encounter a widespread and insistent demand for the public acquisition and management of our entire railway system. Moreover, as the nature of transportation is more clearly perceived, and views enlarge as to the functions which government may usefully exercise, it is to be expected that the argument in favor of railway nationalization will become more attractive and convincing. Private opinion and judicial utterance agree that railroads are public highways, having the same essential relation to social order as the streets and avenues which have been dedicated to public use and always controlled by the state as matters of primary and common concern. Therefore, public ownership and operation of our railways is chiefly important in its economic aspects; it is simply a question of expediency.

What may be called the political objection is naturally the first to occur. This objection takes a twofold form. In the first place, it is said that the public ownership of railroads is opposed to the traditional policy of our government and the historic development of its institutions. While the doctrine of *laissez faire* was not, even at the outset, fully adopted,

still the general sentiment of our people has deprecated the extension of state functions and discouraged any radical inroad upon spheres of action occupied by private enterprise. Besides, it is claimed that such an enormous increase of public activities would overtax the power of successful management and bring about a serious disproportion between public and private operations. To say nothing of the difficulties involved in the acquisition of these properties, the task of their administration would be so tremendous and so liable to be poorly performed, as to endanger the business balance which now seems fairly well maintained. The weight of this objection is conceded, the satisfactory answer to it not easily made. We hardly see how the roads could be taken over gradually, thereby allowing for growth of experience in unaccustomed duties; apparently the entire system would have to be acquired at once, or within a comparatively short period, without time for adequate preparation. Still we are not quite willing to place limits upon the ability of a people so intelligent and resourceful as our own. We may well claim that they have proved themselves equal to every demand, and that even this gigantic task is not beyond their capacity. The enlargement heretofore made in the field of public performance has been justified by results, and it may be confidently asserted that our government has up to this time assumed no function or activity which we would consent to have it abrogate. Nor can we deny as an abstract proposition that a self-governed people, worthy of their heritage and opportunities, may best realize their ideals by collectively doing more and more of the things which affect the public welfare.

The other form of this objection is the danger of abuse through party control of such vast properties, representing so large a share of the wealth now in private hands, and the enormous voting strength of a million or more of railway employees. That this objection is a serious one cannot be denied. Such experience as we have had is hardly sufficient to relieve our apprehension. True, there is now a considerable army of government employees, and their influence upon the results of elections is hardly appreciable; but

what would happen, for the time being at least, if all the railway employees of the country suddenly became government servants, no one can safely predict. We may believe, however, that the nature and magnitude of their work would so emphasize the necessity of stringent civil service rules, and popular sentiment would so emphatically condemn any attempt to use the railway employees for political purposes, that the danger in this direction would be far less than many imagine and would not be long in disappearing. For myself, I do not regard this objection as serious enough in itself to decide the question in favor of private ownership.

This view is confirmed by the fact that railways now exert a powerful and often decisive influence upon public affairs. That influence is not confined to the control of votes upon election day, but extends to the conduct of primaries, the organization and sometimes the corruption of legislative bodies, the selection of appointive officials of every grade, and the enactment and administration of local, state and national laws. It is always alert, aggressive, selfish; it is sometimes unscrupulous and demoralizing to the last degree. We may well question whether government ownership would under any circumstances introduce into American politics a more vicious or dangerous force than the railways now exert.

It goes without saying that there are serious evils connected with existing railway methods. The roads have been built by private capital and conducted for the most part as private enterprises. The principle of competition has been upheld by public opinion and enforced by state and national laws; yet the obvious results of that competition are discriminations which favor the few at the expense of the many, and which are a serious and often fatal disadvantage to those who are denied favors which others enjoy. Capital always takes advantage of competition, and nowhere is that advantage greater than in the use of railway facilities. Almost any price may be profitably paid to secure immunity from practices which now prevail. Government ownership would undoubtedly remove these discriminations. It would insure open and stable rates, applied to all alike without variation

or exception. The price of transportation would be as certain and unquestioned as the price of postage stamps. There might be some frauds in underbilling, false description of property, and the like, as there are frauds upon the customs and internal revenue laws, but adequate penal provisions and vigorous prosecution of wrongdoers would reduce offenses of that character to a minimum. It would be a question of only a little time when all secret and preferential rates would disappear and equal treatment be accorded for equal service in all cases. This would be an immense gain, and herein lies perhaps the most persuasive argument in favor of public ownership. As against this, however, there would unavoidably be a certain rigidity of rates which would to some extent interfere with the ready adjustment of changes to changing commercial currents and the varying conditions of supply and demand. It is not probable that under a system of public ownership there could be quite the same adaptability of rates to business requirements as obtains under private ownership.

In addition to uniformity and equality of charges which would result from government ownership, the advocates of that policy claim other advantages which deserve consideration. One is the security of capital which would be invested in the obligations issued to purchase the roads. There is something to be said in favor of a national debt when the creditors are citizens of the debtor state and the holders of it promises to pay. As the basis of currency issues, as an investment for savings banks, trust companies, estates, and the large class of persons who are not fitted for active employment, there is apparently nothing better than government bonds. Indeed, it is difficult to provide a substitute security for these various and important purposes and others of similar character. If the railroads were self-supporting, that is, earned enough to pay the interest on their cost, provide for their running expenses, maintenance, extension and improvements, with rates at least equally as low as would be secured under private ownership, the obligations incurred in acquiring the properties, whether in the form of bonds

or guaranteed stock, would meet an increasing demand and prove a safe and stable foundation for our financial system.

But more than this, the elimination of railway securities as they now exist would, it is claimed, produce much indirect benefit. These securities are at present among the principal subjects of speculation. The prices at which they are sold constantly fluctuate and often represent something quite different from the actual value or earning capacity of the roads. The gambling instinct is stimulated by sudden and extreme changes in quotations, with the consequent opportunity to make large gains quickly, while the corresponding losses are equally sudden and disastrous. To get rid of all this manipulation, to withdraw these securities from the exchanges and stop all speculation in railway shares, would seem to be a distinct advance in the direction of business morality. When fortunes could no longer be made by dealing in this class of stocks, the capital and ability now devoted to that pursuit would be turned into more legitimate channels. It might prove an object lesson of immense value. We scarcely realize the demoralizing effect of this many-sided lottery. The fact that fortunes are quickly acquired in this way excites the passion for gain and breeds discontent with the plodding methods of slow accumulation by diligent labor and constant economy. The moralist, as well as the economist, may find something worthy of reflection in the point here suggested.

It is further claimed that public ownership would secure lower rates of transportation. Theoretically, this is true, but whether that result would be realized as a matter of practical experience is more than doubtful. It seems to be the case everywhere, and is likely to be for a long time to come, that government service costs more in proportion to the work performed than private service. It is quite conceivable that the railroads of this country could be made to pay interest, say from 3 to 4 per cent, on their fair valuation, in addition to all their expenses, with a general scale of rates somewhat below the present standard. Given the same efficiency of management, the same energy and economy of administra-

tion, the same basis of wages and salaries as obtain under private ownership, and a considerably smaller charge than is now paid per unit of service would be sufficient for financial solvency. But this assumes a state of things not likely to exist if the railroads were operated as a government function. Any expectation to the contrary is not warranted by knowledge of what has generally characterized the various branches of government service.

Public ownership would doubtless mean higher wages and shorter hours of employment, but this again would mean an increased number of servants, adding materially to the cost of the maintenance and operation.. Upon this point it is often remarked that enormous salaries are paid to railway presidents and other officials, and that outlays of this sort would be stopped because no similar scale of compensation would be paid to government officials performing like duties. This argument, however, is rather specious and is used mainly by those who have made no calculation to see how small a figure it cuts in dollars and cents. Without having made the computation, I venture to say that if all railway salaries above \$5,000 a year were discontinued the saving would not be appreciable in the price of a railway ticket or the cost of moving a hundred pounds of freight.

With reference to future construction and the extension of railway lines, a word may be properly said. That there have been many instances of needless duplication of railway lines, actually or nearly parallel, is perfectly well known; but government ownership would not correct mistakes that have already been made in that regard. The roads would remain where they were built and their continued operation would practically be necessary. In constructing additional roads a more rational plan might be followed and a repetition of past follies avoided. But here again we run against political objections. On the one hand is the danger that too great conservatism would prevail, with the consequent failure to supply extensive and developing sections of the country with needed facilities. On the other hand is the danger that there would be an over-production, having reference both to cost

and to public requirements. More than this, the building up of important lines, or their extension in certain sections, might become a political issue. We cannot be sure that the development of our railway systems by the government would be guided by needful wisdom and fairly balanced as between the demands of localities and justice to the tax-paying public. On the whole, we may conclude that the distribution of our railway mileage, both with reference to territory and population, has been fully as rapid, judicious and satisfactory as would have been the case if the government had constructed the roads and determined from the first, their number, character and location.

And in this connection I suggest a phase of the subject which has not apparently received much attention. It is not enough that open rates be published and rigidly observed. That of course insures equality of treatment as between individuals in like situation, a result that would certainly be secured by public operation of the roads. But there is another aspect of the rate question which presents far greater difficulty and which is wholly independent of railway ownership. The fair adjustment of rates as between different communities and different articles of traffic is a matter of the highest consequence because upon that adjustment depends the most commanding commercial interests. If the state owned the roads all secret discriminations would disappear, but then as now the question would arise, for instance, how rates on wheat should compare with rates on flour; how rates on dressed beef and packing house products should compare with rates on live animals; how rates on grain and grain products, produced in the great middle west, to north Atlantic cities should compare with rates on the same articles to ports on the Gulf of Mexico. These and an endless variety of similar questions would demand solution under government ownership precisely as they demand solution at the present time under private ownership. And the danger is that those questions would become political issues to be settled by the action of the majority party. I can see how railway officials and employees, all being government serv-

ants, might be kept out of politics, or at least prevented from exercising any undue or improper influence upon policies and elections. I can see how a trained and efficient force might be equal to the complicated task of management and operation. I can see how the financial difficulties could be overcome and rates so adjusted to needed revenue as to save the people from any indirect taxation for railway support, and at the same time give them extremely cheap transportation. But I have grave apprehension along the line now suggested. More and more as modern industrial methods are applied and perfected, as business is conducted upon an enlarging scale with a narrowing margin of profit upon each unit of production, more and more will the question of relative rates become controlling. Shall coal be taken to Chicago from Indiana or from West Virginia? Shall iron and steel products be manufactured in Pittsburg or in Cleveland? Shall export traffic leave the country by way of New York or New Orleans? Shall wheat be made into flour at Minneapolis or Buffalo? Shall certain localities be supplied with oranges from California or from Florida? Shall sugar be made with beets grown north of the Ohio and Potomac rivers, or from cane in Louisiana or Hawaii, or Cuba and Porto Rico? Will the Pacific Coast jobbers who are reaching out for the trade of the Orient get their supplies from the Mississippi Valley or from the Atlantic seaboard? Will those supplies be carried by rail or by water? These and a thousand similar questions will be largely answered by the rates fixed for carrying the traffic. If the government owns the roads and operates them, Congress may fix the price of transportation as it now fixes the price of postage or the internal revenue tax on any article; and it is conceivable that, as the result of an election or in the redemption of party pledges, a system of rates might be adopted which would enormously benefit one or more sections of the country whose representatives combine to that end, while placing other sections at serious disadvantage. In this direction I see the greatest difficulty, and it is on this ground, more than any other, that I should regret to see the government take up the business of owning and operating our railway lines.

There is another and distinctly economic phase of the subject from which arguments may be drawn both for and against the nationalization of railways. Indeed it leads to the most interesting reflections because of its wide significance and permanent character. On the one side it is said that to withdraw this immense industry from private enterprise, and make our transportation a government monopoly, would seriously restrict the field of private activity and in a way leave insufficient scope for individual effort and achievement. It is opportunity that furnishes inducement to action, because of the rewards that may be secured; and where opportunity is lacking there is corresponding temptation to idleness and ease. When we consider how many men win wealth and prominence in connection with the building and operation of railroads, or through their relation to reorganizations and consolidations, we can see that there is an element of disadvantage to the ambitious, not to be lightly regarded, in taking so great an industry from the field of private performance. What the actual effect would be, we can only conjecture.

Against this, however, two things may be said, First, as a practical matter, we may believe that ample opportunities for success would be found in other directions. Our territory is so great, its resources too varied and exhaustless, there are so many new things to be done, so many prizes to be won in other spheres of activity, that the withdrawal of all railway operations from the field of private enterprise would not seriously handicap the determined and capable. Indeed, as incidental to this point of view, it may be remarked that the stability and certainty of transportation charges under government ownership would give a freedom to individual effort which very many under present conditions do not enjoy. If the facilities of rail conveyance were available to all persons on like terms, so that the burden of transportation rested with equal weight upon competing producers and dealers, there would be a liberty of private action which often does not now exist, for the like enjoyment by all of this public service would remove the bonds by which many an industry

is today hampered and many an occupation deprived of its rightful privileges.

But there is a further and more important consequence to be taken into account. We are constantly reminded of the gross inequality in the distribution of wealth, and see in the facts of every-day life much cause for dissatisfaction in this regard. We feel reasonably sure that a more equable division of property would be a great social and economic benefit. If this be desirable, as I think it is, how can it be brought about except by withdrawing from private enterprise those activities of a public nature whereby great private fortunes are and have been acquired. There is no honest way of getting rich in connection with an industry conducted by the public. If the railroads were acquired by the state and conducted as a government monopoly, the opportunity for money making in that field would of course disappear. Granted that this might work in some cases against individual success, yet on the whole might it not prove a needful corrective of present tendencies, and thus indirectly but certainly lead to a better because more even distribution of the nation's wealth?

Consider, for example, what has occurred within the last few years in the street railway service of cities. The recent substitution of electricity for animal power furnished an opportunity which a few foresaw, and they have been greatly enriched by exploiting a public franchise. That the public has had the benefit of much better service without increased cost is beside the present question. The point is that had these franchises not been granted, had they remained the possession of the public, the great fortunes made in street railroading would have been impossible. It may be better as it is; the municipal ownership of street railroads might not have been a financial success or a public blessing, but a small group of persons would not have been able to accumulate unusual wealth. If, in the long run, it makes for the general welfare to prevent the quick and easy making of private fortunes in connection with a public service, what other course remains except to emancipate all forms of public service from the domain of private enterprise.

If we test the utility of public ownership by the experience of other countries we find little that is convincing either one way or the other. On the whole the tendency is strongly in that direction. And this tendency, it is interesting to observe, is quite independent of the form of government. For instance, there is Germany, which the ordinary person regards as the nearest to a monarchy of any great modern state, which already owns and operates a large portion of its railways and is apparently aiming to still further extend its railway operations; and right alongside of Germany is little Switzerland, which we picture to ourselves as about the most democratic of modern governments, which has recently acquired all the railways within her territory and is to conduct them as a government service. The step was taken only after long deliberation and under a proceeding which reflected the unquestioned preference of the Swiss people.

From such countries as Australia and New South Wales conflicting accounts are received, varying largely, it would seem, from the point of view and preconceived notions of the observer. Within the last few months I have had occasion to meet men from both those countries who are thoroughly well informed, not only as to the operation of their railroads, but as to the sentiment of their people, and I was assured that the idea of discontinuing public ownership and allowing the railroads to pass into private hands would find no support in public opinion or be regarded as among future possibilities. It is true, the conditions existing in other countries are quite different from those encountered here. This is so not only as to the character of the population and industries, but also by reason of the traditional sentiment and attitude of the people towards their governments. In England, as is well known, the geographic and other conditions are quite unlike those existing here. More than that, there has been in England from the beginning a more rigorous control of railways than in this country, while various causes have brought about to a great extent a division of territory between different railway systems, so that competitive forces have been kept under efficient restraint. The discriminating

practices which are here so prevalent and alarming are there virtually unknown.

It is a great question, one upon which the last word has not by any means been said. That it will be more and more discussed I am very certain. That it will become an early political issue I do not expect and assuredly do not desire. But as was remarked at the outset, no one can tell how soon it may be forced to the front and absorb the attention of the country beyond all other matters of public concern.

One thing an aroused and dominant sentiment will surely demand and that is the doing away with those vicious discriminations which have characterized and often disgraced our railway operations. Such offenses against right and justice will not always be tolerated. If consolidations and unified management bring open and reasonable rates, if more intelligent and adequate laws aid the elimination of abuses and give success to the work of public regulation, the agitation for state ownership will not for a long time make perceptible headway. That is the outcome which seems plainly the most desirable. If it can be secured through associated action and efficient supervision, the public will be satisfied to leave the railways in private hands; but if abuses continue and chronic evils prove incurable by methods we much prefer to use, then there will be no alternative except to acquire and operate the railways as a government function. If regulation fails public ownership will be the next and early resort.

AFFIRMATIVE DISCUSSION

North American. 174: 46-58. January, 1902.

Inadequate Powers of the Interstate Commerce Commission.
Edward P. Bacon.

There is no element in the economic world that is so pervasive as the cost of transportation. It constitutes an integral part of the cost of every article of food and clothing used by every man, woman and child, and of all materials that enter into the construction and furnishing of a habitation for man, and the heating and lighting of such habitation; and, in fact, of everything that is employed for the sustenance and comfort and gratification of man. To the man who ultimately meets it in the price of what he consumes, it comes as mysteriously as the wind which "bloweth where it listeth, and none can tell whence it cometh and whither it goeth." It is collected as silently and as unconsciously to the actual payor as the customs duties of the government, the levying of which is the subject of deliberate and sharply contested legislation, over which the entire country is thrown into a paroxysm every few years. But the levying of freight charges, which for railway traffic alone aggregate annually five times as much as the customs duties, is left wholly to the irresponsible and self-interested action of railway officials, without any practical governmental supervision, and with no restraint whatever except that imposed by the natural law which determines "what the traffic will bear." The figures furnished by the statistical bureau of the Treasury Department of the United States show that the import duties collected during the three years from 1898 to 1900, inclusive, aggregated \$581,001,542, and the freight earnings of the rail-

roads of the country for the same period, according to the reports of the Interstate Commerce Commission, aggregated \$2,843,038,287.

As is well known, a process of amalgamation, or unification of interest, has been going on for some years past between competing lines of railway, which has during the last two years assumed enormous proportions, and competition is fast becoming extinguished. During the period last mentioned a large proportion of the railway mileage of the country, variously estimated by different authorities as aggregating from 101,000 to 112,000 miles, constituting not less than three-fifths of the entire railway mileage of the United States, has been brought under the absolute control of five great capitalists, and the process is still going rapidly forward. This constitutes a power for extorting money from the public the exercise of which, however fair-minded may be the individuals in whose hands it is now vested, it is certainly unwise to permit without throwing around it such safeguards for the protection of the public, by governmental authority, as shall effectually prevent its abuse; otherwise it is appalling to contemplate the results that may ensue.

We have a striking presage of these results in the joint action of the railroads using what is termed the "Official Classification" of articles of freight, comprising all the railroads in the territory lying east of the Mississippi River and north of the Ohio and Potomac rivers. By that action, which went into effect on January 1st, 1900, a large number of articles were transferred from a lower to a higher class, by which means they were subjected to higher rates, including many articles of the most common use. According to a report issued by the Agricultural Department of the Government on April 1st, 1900, no less than 592 articles were so raised in classification, and consequently in rates charged for their transportation. For example, sugar, coffee, soap and starch, in carload lots, were raised from sixth to fifth class, involving an advance in the rate for transportation, in the case of a shipment from New York to Chicago, of twenty per cent. On a large number of articles the change in classi-

fication involved an advance in rates of from fifty to one hundred per cent., and in some instances even more. Many articles, when shipped in less than carload quantities, were transferred from a lower to a higher class, while the same articles shipped in carload lots remained in the same class as before, which resulted in an excess of from thirty-three to eighty per cent. being charged for transportation of the same articles when shipped in less than carload quantities over the rate in full carload lots; and in some cases the excess was from one hundred to one hundred and fifty per cent. The actual difference in cost to the carrier for receiving, billing and delivering freight in less than carload quantities over the cost in full carload lots does not average over one per cent. The difference in cost of hauling, owing to the cars not always being loaded to their full capacity in combining lots of less than carload quantities, may be from one to two per cent. more. Making the most liberal allowance for the entire difference in cost arising from the difference in circumstances and conditions relating to the two kinds of shipments, it is the belief of the writer, from a careful observation for many years of the details of freight traffic by railroads with which he has been brought into continuous and close contact, that there is no justification for a greater difference than five per cent., at the most, in rates charged for less than carload quantities over those charged for full carload lots of the same articles, excepting in the case of articles shipped "in bulk" whose identity must be preserved. Any greater difference than this is an unjust discrimination in favor of the dealer whose trade enables him to order goods in carload quantities. The effect of this is, as will readily be seen, to destroy the business of interior distributing points and concentrate trade at great commercial centres.

Some idea of the effect of so extensive a change in classification of freight articles may be gathered by taking the single article of sugar as an example. In the annual "Report of the Statistics of Railways in the United States," issued by the Interstate Commerce Commission, for the year ending June 30th, 1900, the tonnage of sugar transported by the

railroads of the country during the year, originating on the line of the companies reporting, is given as 2,050,558 tons. The advance in rate, produced by transferring this article from sixth to fifth class, in the case of shipments from New York to Chicago, was one dollar per ton, the previous rate having been in force for a period of fourteen years. It is fair to assume that this represents the average advance in the rate charged on the aggregate tonnage of sugar shipped to all points throughout the country, taking into consideration the fact that rates of freight between New York and Chicago are relatively much lower than those charged between Chicago and points farther west, and also than those charged on shipments to intermediate points on the route or for shorter distances to other destinations. This would indicate that the increased amount of money paid by the people of the country, as a whole, for the transportation of sugar during one year, resulting from the change made in the classification of this article, was over two million dollars. And this is only one of 592 articles that were similarly affected by the change made in classification, some to a much greater and others to a somewhat less extent. The same advance was produced in the rate charged for the transportation of coffee, starch and soap and numerous other commodities of common use, the aggregate yearly tonnage of which is enormous. The previously existing rate on coffee and starch had been in force for a period of twelve years and that on soap for eight years. An advance of fourteen per cent. was produced in the rate on cotton piece goods, the previous rate on which had been in force thirteen years.

That existing railway rates are higher than is necessary to afford a suitable return on the capital invested in railway property is apparent from the fact that the net earnings of the railways of the country, as shown in the annual report of the Interstate Commerce Commission on the Statistics of Railways, for the year ending June 30th, 1900, the last fiscal year for which returns have as yet been compiled, after paying interest on their funded debt, and dividends on their stock aggregating \$118,624,409, produced a surplus of \$142,-

754,358, an amount actually over twenty per cent. greater than the sum paid out in dividends. The Commission states that there were paid out of the surplus the sum of \$25,500,035 for permanent improvements, the sum of \$29,596,390 for "miscellaneous deductions," whatever that may mean, leaving the sum of \$87,657,933 to be carried to surplus account. By what right the railway corporations of the country levy a tax upon the public for funds with which to make permanent improvements which add to the value of their property, and in addition thereto pile up a surplus to further enhance the value of their stock, the present writer is unable to determine. The entire surplus first above mentioned, over one hundred and forty-two million dollars, was wrongfully wrung from the pockets of the people during the year.

There is a prevalent impression that there has been a continuous decline, for a number of years past, in rates of freight throughout the country, which is due probably to the fact that the average rate per ton-mile for the aggregate tonnage transported has shown a steady reduction from year to year, having fallen from 1.01 cent in 1885 to .72 cent in 1900. This, however, has been the result of a larger relative increase in the movement of coarse freights, from year to year, which pay the lowest rates, than of merchandise and agricultural products, which pay much higher rates, and also of a steady increase in the average distance to which freight of all kinds is being transported, the rates charged for long distances being, and rightfully so to a reasonable extent, proportionately lower than for shorter distances.

Railroad Regulation. pp. 8-10.

William D. Washburn, Jr.

Overcapitalization may be regarded as the greatest evil of the present railroad system.

In 1901 the capitalization of the railroads amounted to \$11,688,177,991, and has since been materially increased.

At this time about \$5,800,000,000 consisted of funded debt which, it may be fairly assumed, paid a large portion of the actual cost. The capitalization at that time amounted to \$61,000 per mile, which is probably 50 per cent more than the real cost of the roads.

The stock of the roads amounted at this time to some \$5,800,000,000.

In the prosperous railroad year of 1900, less than half the stock received any dividend at all.

In 1897 only 28 per cent received any dividend.

The investigations of the railroad committee last winter showed that the capitalization of Minnesota roads amounted in 1904, to \$343,611,135, or an average of \$46,000 per mile against some \$273,448,971 in 1901, which was only \$38,000 per mile.

This shows an increased capitalization of \$70,000,000 made in three years with an increased mileage in the state of only 475 miles.

At a maximum figure of \$40,000 per mile, such mileage should not have cost over \$19,000,000.

This leaves an apparent valuation of \$50,000,000 added to the indebtedness of the railroads, without any corresponding increase in real value of assets in Minnesota.

The capitalization of the railroads in the state therefore apparently increased from \$38,000 to \$46,000 per mile, or an increase of 20 per cent upon which the producer is supposed to pay profits.

To pay interest on this fictitious stock at four per cent would require an increase of two million dollars in freight rates in the state of Minnesota.

That the same system of over-capitalization has prevailed in other parts of the United States, is indicated by the fact that the total indebtedness of all roads doing business in the state of Minnesota increased from \$1,494,000,000 in 1900, to \$2,184,000,000 in 1904.

This is a total increase of \$689,000,000 in three years, or a tremendous increase of indebtedness without a corresponding increase in assets.

This amount should have built nearly 17,000 miles of road, which in fact was considerably more than all the new mileage built by all the railroads in the United States during that time.

Over-capitalization is too apt to be considered as one of those funny jokes by which the innocent are fleeced in Wall Street. As a matter of fact, it is one of the most sinister evils that overshadows the economic life of the nation.

Watered stock may not pay interest today or tomorrow, but it remains constantly in existence as a means by which unfair rates may be kept in force long after they have become extortionate.

The cost of carriage may be decreased from 25 to 30 per cent, as it has during the past twenty years, but the freight rate remains practically the same.

As long as the railroad apparently pays from six to eight per cent upon its stock, public criticism is allayed.

For a clever people, it has taken the American people a long time to discover that six or eight per cent upon watered stock is twelve or sixteen per cent upon the real value of corporation property.

Watered stock is a contrivance, subtle, dishonest and unjust, not alone to living citizens, but likewise to their descendants, whose inheritance and enterprise are thus covered with a perpetual mortgage which automatically absorbs the profits to be made by generations yet unborn.

On the assumption that only 50 per cent of all stock paid dividends in 1900, this leaves \$2,500,000,000 of the railroad stocks that are purely fictitious. It will take \$100,000,000 of additional net freight earnings to place this stock upon a 4 per cent basis. Rates will naturally be maintained or even increased in an effort to make earnings upon this fictitious capital.

The issuance of watered and worthless stock should be strictly prohibited by the state in behalf of the citizen who is paying unjust rates to meet the interest upon the property that does not really exist. The cost of railroad carriage decreases yearly by the adoption of improved methods of transportation. Is it unreasonable to demand that the public

share the benefits thus derived by a substantial decrease in railroad rates as occasion warrants?

Public. 11: 401-3. July 24, 1908.

Public Ownership of Railroads: Safety of Travel.

Erik Oberg.

While at the present time the German state railways carry nine hundred fifty million passengers a year, compared with less than seven hundred fifty millions carried by the railroads in the United States, a comparison on this ground is not fair, inasmuch as the average journey in Germany is only about one-half as long as the average journey in the United States. The comparison should therefore not be based on the total number of passengers, but upon passenger miles. If we do that, we are more than fair to the railroads of this country, because, inasmuch as the traffic is far heavier on the German roads than the average traffic here, the liability to accident for the same number of passenger miles should be greater there. The carrying of nine hundred fifty million passengers over 33,000 miles of road means a very much denser traffic than the carrying of seven hundred fifty million passengers over 210,000 miles of road. Furthermore, it must be admitted that the risks of accident are at least proportional to the density of traffic, or, perhaps, even increase as the square of the density; we, therefore, on two equally well managed roads would expect to find the greater number of accidents happen on the roads with the denser traffic, or the one carrying the greatest number of passengers per mile of track.

Table XVI.

Comparison Between Number of Persons Killed and Injured for
1,000 Million Passenger-Miles on American and
German Railways.

	United States.	Ger- many.
Number of passengers killed in collisions and de- railments	14.3	2.2
Total number of passengers killed.....	22.5	9.1
Number of employes killed in collisions and de- railments	24.4	1.2
Total number of employes killed.....	141.2	42.6
Number of passengers injured in collisions and de- railments	254.3	35.8
Total number of passengers injured.....	439.2	45.3
Number of employes injured in collisions and de- railments	199.0	14.8
Total number of employes injured.....	2,808.0	111.5
Total number of people killed.....	407.7	91.4
Total number of people injured.....	3,614.0	184.2

For this reason a comparison of passengers killed and injured per a certain number of passenger miles is more than fair to our American railroads. If we make such a comparison we will find that while in Germany only one passenger is killed in collisions and derailments for one thousand million passenger miles (average for ten years), in the United States fourteen passengers are killed in collisions and derailments for the same number of passenger miles. The number of the injured under the same conditions are in the proportion of *one to thirteen*. The total number of persons killed on the German railroads compared with the total number killed in this country is in the proportion of *one to four* for equal number of passenger miles. The total number of injured is in the proportion of *one to fourteen* for the same number of passenger miles. This comparison is between the German average for ten years, and the conditions on American railroads for the year ending June 30, 1905. If we, however, compare with the year 1900-1901 in Germany, which was particularly one of great accidents, and one where the German average was greatly exceeded, we still find that for each passenger killed there, for a certain number of passenger miles, between six and seven were killed here in collisions and derailments. The proportion of those injured was *one to seven* under the same conditions. A detailed state-

ment is given in Table XVI, where a comparison based on one thousand million passenger miles has been computed. It cannot be argued that the results there put forth are explainable for this country on account of higher speed or heavier traffic. The speed on all the German main lines equals or exceeds the ordinary speed of the trains of our railway lines, and as for traffic, few American railroads have as heavy a passenger traffic as the thickly populated German Empire offers its railroads. In reference to Table XVI it may be said that although the accidents were heavy in the United States in the year taken as an example (1905), the comparison is still more than fair to our railroads, as the year selected for Germany shows that the number of passengers killed and injured in that year in collisions and derailments *was more than three times the average number for the preceding ten years*; the number of passengers injured under the same conditions was nearly three times as great; and the number of accidents in general in that year was higher than the average for the German roads. Hence, a perfectly fair comparison for American roads is offered in Table XVI. It must, of course, be admitted that it is very difficult to determine a basis for comparison of the fatalities to employees on account of the fact that in such a comparison the passenger as well as the freight service enters. Supposing that we compared the accidents to employees on the basis of the ton-mileage in Germany being about one-ninth the ton-mileage in the United States in the years compared. We would still have the proportion of employees killed in train accidents in Germany and the United States for the same number of ton-miles as about 1 to 6.3, and the proportion of those injured as 1 to 4.5.

This comparison is a deplorable one to make. "What is the use of our boasted development, if we cannot attain it except at such a cost of human life? Why is it that American railroads prove so much more unsafe to their patrons, as well as to the employees of the road?" asks one of our railway journals. And the same journal proceeds:

We do not believe that it is because American railway employees are less capable, or naturally more reckless. It seems

more plausible that the explanation is rather to be found in the lack of true system in our train movements, due, perhaps, in the last instance to the financial influence which governs our transportation system, creating, as it does, a spirit of irresponsibility. Whether the fact that German railroads are public property, run in the same manner as our government runs the postal service (with a great deal less political pull, to be sure), has anything to do with the greater safety of German railroads is difficult to assert, although it seems likely that this must be one of the favorable influences. At any rate, it is safe to say that private ownership, when accompanied by the past and present irresponsibility of railway managers, has proved fatal to the safety of passengers in the United States, and we earnestly hope that conditions will turn for the better, now that public opinion is aroused more than ever, and proper safeguarding is demanded for the life and limb of both passengers and employees. No other railway reform is more urgently needed. One important step was taken when the hours of duty of railway employes were shortened, but it is difficult by legislative measures to cure evils of this kind. What we need most of all is an aroused public opinion, and that somebody be held responsible in each case for this horrible killing and maiming.

The figures previously stated should be considered if we are in doubt about the efficiency of governmental as compared with private management. Let us study the painstaking efforts of government-owned railroads in Europe, particularly in Germany and the Scandinavian countries, for the safety of the public. Let us wake up out of the sleep through which we have become so used to having hundreds of people killed yearly by railway "accidents," that we have commenced to look upon this matter as the natural accompaniment of railroads. Let us realize that the necessity for railway accidents would be less imperative if the lives of our citizens were valued more than dividends on watered stock, arrogance in high office, and an all powerful monopoly, which, instead of being governed, has tried to govern the country, and, in fact, has succeeded in governing many individual states.

The German railway authorities make every effort to make life safe on the railways, for passengers as well as for employes. Thorough investigations are made of every wreck, little or big, to find out the causes, and prevent their recurrence. Not infrequently someone is held responsible and punished for their occurrence. Exhaustive testimony is taken with the thoroughness of a criminal trial, the idea of the state railway managers being that the detailed history

of railroad accidents affords the best basis for taking precautionary measures for their avoidance in the future.

A German railway official, having traveled in the United States, in a well put statement charged many of our accidents to lack of punctuality and a general lack of systematic working of American railroads. Our train dispatching system, with a single responsible dispatcher for a large portion of a system, he considered out of date; and he stated his belief that our railway system now, with introduction of mechanical signalling, etc., could make use of the more modern German system of running trains. He also found that at the stations the whole responsibility of the train movements was not placed in a single individual, as in Germany, and that this lack of systematic working also was a prolific cause of accidents.

There are, however, some other important causes for railway accidents in this country which this German observer either did not realize or else did not call attention to. Among these may be mentioned the overworking of employees; the existence of train rules which cannot well be lived up to, and which employees are not expected to live up to; the attempt to carry on a double track business on a single track road; general lack of initiative and fear of new departures; and in particular, too much adherence to that provincial American trait which prevents learning lessons from the outside, and profiting by the progress elsewhere.

The safety of other state railway systems, besides the German, is not less noteworthy. The Swedish state railroads at present carry more than 16,000,000 passengers a year. The total number of passengers killed by accidents not caused by their own carelessness, has been eight for a period of forty-seven years. The number of passengers injured during the same period, the injuries not being due to personal carelessness, have been sixteen.

On the Danish state railways only one passenger is either killed or injured for each 3,500,000 passengers. In the United States one person, in 1905, was either killed or injured for each 70,000 passengers.

North American. 134: 134-48. February, 1882.

Remedy for Railway Abuses. Isaac L. Rice.

It is generally supposed that common carriers must treat all persons alike. But railways do not treat all persons alike. They give more advantageous terms to certain communities than to others; and to certain individuals, than to others.

These more advantageous terms are called "discriminations in favor" of such communities or individuals. They necessarily act to the detriment of the remaining communities and individuals.

Discriminations may be classified under three heads:

First. Discrimination in favor of one or more centers of commerce, to the detriment of another or other centers of commerce.

Second. Discrimination in favor of places where there is a competition between two or more railways, to the detriment of places where one of these competing lines has a monopoly.

Third. Discrimination in favor of one or more individuals of a certain locality, to the detriment of other individuals of that locality.

The following is an illustration of the first class: The great Eastern centers of commerce, Boston, New York, Philadelphia, and Baltimore, are connected with the great emporium of the West, Chicago, by four great trunk lines. In 1877, these trunk lines entered into a combination for the purpose of dividing the traffic between the above-named sea-board cities and Chicago in a fixed proportion, instead of continuing to compete for the whole of it. According to the terms of this combination, the people of New York City were compelled to pay from two to six cents per one hundred pounds in excess of the rates charged to the people of Philadelphia and Baltimore, while the people of Boston were to pay no more than those of New York. This arrangement was a discrimination in favor of the people of Boston and to the detriment of those of New York, since

the distance from Chicago to Boston exceeds the distance from Chicago to New York by at least fifty miles. It was also, in all probability, a discrimination against New York in favor of Philadelphia and Baltimore; for, although the distance between New York and Chicago is somewhat greater, the gradient is so decidedly in favor of New York that, practically, neither Philadelphia nor Baltimore are as near to Chicago as is New York.

The following illustrates the second class: The distance from Milwaukee to New York *via* the New York Central railway is about one thousand and fifty miles. The distance from Rochester to New York *via* the same line is three hundred and seventy-one miles. A Rochester miller ought, therefore, to pay about one-third as much as a Milwaukee miller for transporting his flour to the New York market. The late railway investigation of this state revealed that the former was compelled to pay fifty per cent. more than the latter. The reason for this discrimination in favor of Milwaukee, to the detriment of Rochester, lies in the fact that Milwaukee is a point at which various lines terminating in New York City compete, while Rochester is a point tributary to the monopoly of the New York Central railway.

The third class is illustrated by the following example: A is a small dealer in an interior town of the state; he must pay forty, thirty, twenty-five, or twenty cents per one hundred pounds, according to the kind of goods carried for him. B is a large dealer at the same place; he pays only thirteen cents per one hundred pounds for all kinds of goods.

The evil effects of discrimination and fluctuation become apparent on the slightest reflection.

The first class of discrimination alters the natural course of commerce and tends to paralyze business by shaking its very foundations. The statistical abstract of 1880, p. 37, shows the immense gain of Philadelphia and Baltimore and Boston, in the matter of exports, over New York since 1874. In 1874 the value of exports from the first-named three cities amounted altogether to \$88,947,643; in 1880 it amounted to \$183,856,652. In 1874 the value of exports from New York

amounted to \$340,360,269; in 1880 it amounted to \$388,441,664. From these figures it becomes evident that while the exports from the three ports have increased over one hundred and six per cent. in six years, the exports from New York have only increased fourteen per cent. The chief evil in this class of discriminations lies not as much in the hardship it imposes upon the losing city (great as the evil undoubtedly is), as in the fact that centers so populous, and of such vast economical and political importance, should be virtually at the mercy of a handful of men, who can to-day unsettle what was settled yesterday, and to-morrow again unsettle what was settled to-day. It increases enormously fluctuations in value, and thus promotes wild speculation, and depresses proportionately the sound producing and commercial potentialities of the whole country.

The second class of discriminations resembles the first in so far that it builds up one district of the country at the expense of others. Its effects are, however, far more striking, as it operates upon smaller centers, where capital is not so abundant, and is largely invested in factories. As soon as the New York Central carried flour from Milwaukee to New York at a lower rate than it carried it from Rochester to New York, it ruined the Rochester millers. Now, in one important aspect at least, this ruin of the millers of our state acts to the manifest detriment of the whole country. If the export trade is deflected from the city of New York to Philadelphia or Baltimore, there is no apparent loss to the country, as Philadelphia and Baltimore gain what New York loses. The capital invested in that trade is chiefly circulating, and can travel to Philadelphia or Baltimore. In the milling industry, however, capital is chiefly fixed; it is invested in buildings and machinery, and must remain there permanently. Now, the ruin of these mills means simply the destruction of as much capital as is invested in them, not only to the injury of the millers but to that of the whole country. The economic evil following in the train of discrimination in favor of what, in railway parlance, is called "through" traffic, and against "local" traffic, is in this respect

more serious than the one in favor of one sea-port over another; it not only changes the distribution of wealth according to the interests of railway corporations, it actually diminishes it.

Still more pernicious to the prosperity of the country is the working of the third class of discriminations. It aims at nothing less than the complete destruction of the middle classes. The railways carry for the rich shippers at special rates, far below their public tariff. By this means they uproot every vestige of fair competition, and thus drive the less wealthy from the field. These rates are, moreover, confidential and secret, and the transactions have very much the character of conspiracies. The arrangement between various railways and the Standard Oil Company furnishes a remarkable instance of this class. These railways (New York Central, Erie, Lake Shore, and Pennsylvania) found it to their advantage to divide the transportation of oil between themselves, instead of competing for it. They thought that their plan could much better be carried out if they had only one shipper to deal with, and so they determined to reduce the large number of oil shippers to one. For this purpose they made an agreement with a corporation known as the "South Improvement Company," the members of which afterward formed the Standard Oil Company. By this agreement the South Improvement Company was protected against loss and injury by competition, and the railways bound themselves to raise the rates of freight against all the competitors of the South Improvement Company sufficiently to overcome all competition with that company. The result was, of course, that the parties forming the Standard Oil Company acquired immense riches, at the cost of all other persons who had engaged in the oil trade.

To the evils of discrimination we may add those of fluctuations of rates. The insecurity of rates; their sudden changes in times of railway wars; their liability to daily changes in times of peace; the knowledge that they do not fluctuate equally with all, and that the secret fluctuations may be even more extensive than the public; all these things

intensify so considerably the evils of discrimination, that at times they become well-nigh unbearable.

Under these circumstances, is it a wonder that the vague, despairing cry of anti-monopoly is heard everywhere on the face of the land? Would it be surprising if the dark streams of communism which flow in the nether soil were to be fed and swelled to formidable proportions? Let our conservative men see to it that the ills brought on by the present management of the great arteries of the country be cured—that the railway problem be correctly solved.

The proposed solution of the railway problem, placing the entire matter of railway transportation on the highways in the hands of the people of the United States, can cure all economic ills as well as monopoly can do it, for it has all the advantages of the latter, and will bring on none of the political evils incident to monopoly, for it has none of its disadvantages. In this sign alone can monopoly be conquered.

Such an ownership has all the advantages of monopoly, inasmuch as it would be as little under the necessity of discriminating or making frequent and sudden changes in rates as the latter. It would, moreover, be more certain to cure the economic evils from which we are now suffering, for the reason that while the monopolist might or might not consider it to his private interest to cure them, and would always rank his private interest first, the nation has no private interest to consult; and while the monopolist would be responsible to no one, and introduce the needed reforms according to his pleasure, the national railways would be managed by the responsible agents of the United States, and amenable directly to its supervision. And we must consider that even were it possible theoretically to frame laws controlling the monopoly and making it responsible to the people, practically such laws would either not be framed or not be enforced, owing to the tremendous power the monopolist would wield, while the fixing of just rates for national railways would be a simple matter. A formula containing all the elements which enter into the

cost of transportation could be determined by law, and then the rates be fixed strictly according to this formula.

The disadvantages which will probably be popularly objected to national railways are: *First*, That they would tend to centralization. *Second*, The evils of paternal government. *Third*, That our civil service is too corrupt to be trusted with the management of such a vast interest.

To the first objection I reply that railway management of a country requires a certain degree of centralization. The whole system of railways is in reality but a single machine, and we are suffering from the confusion, demoralization, and oppression caused by the fact that it is run by numerous engineers according to private and contradictory plans. Excessive centralization can be easily avoided, as, for instance, it is in the present Prussian state railway system. Moreover, we must remember that centralization is forced on us by the nature of things, and we only have the choice between intrusting it to our own agent, the government, responsible directly to us and acting for us, or intrusting it to a private individual, with interests different from and colliding with ours, and responsible to no one.

The second objection arises out of confusion in the use of the word government. Government may mean the private right of a dynasty, with private interests distinct from, and, perhaps, opposed to, those of the public. Such was the government of the feudal princes in the Middle Ages, the masters of the governed. Or it may mean the exercise of a trust, for public purposes alone, and by servants of the governed, which is the system of the United States. In the first case, the general welfare is often only a misnomer for the private welfare of the dynasty, and the promotion of the former often only a mask to accomplish the promotion of the latter. In the second case, there is no private welfare of a dynasty to be cared for, under any mask, and all measures for the promotion of the public welfare are taken with the consent of the public, under its eyes, and by its servants.

On the other hand, if we permit the railways to come

within the control of a private individual, then we will raise up a private dynasty which will govern us paternally for its own interest and pleasure. Already now the railway magnates openly declare that it is their desire to foster and protect commerce, and the merchants of the country humbly petition them as they would the sovereign. What spectacles would we not behold after the establishment of the monopoly? We would see a nation on its knees before a more absolute potentate than ever ruled.

Let us never forget that (if we must forsooth call a government paternal, because it does its bounden duty of controlling the nation's highways) it is infinitely better to have a paternal government of all, by the agents of all, for the interests of all, than that all should be paternally governed by one for the interests of one.

With regard to the third objection, I would answer that the chief danger to a free country is not the corruption of the civil service, but that of the legislature. The principles which regulate the civil service are responsibility and subordination; the principles which regulate the legislature are irresponsibility and independence. The former is under the complete control of the latter; the latter is under no control whatever. A corrupt civil service cannot exist where the legislature is pure; while a corrupt legislature necessarily taints the civil service. And as it is less dangerous, so also it is more difficult to corrupt the civil service than to corrupt the legislature. The civil servant, if bribed, is bribed to commit a violation of the law, which is a crime; the legislator, if bribed, is bribed to vote, and to vote is his duty. But if legislators are not steeled against the corrupting influences of railways, even under our present system, how can we expect them to become so against the constant baits of a stupendous monopoly controlling the wealth of the whole country? On the other hand, with the railroads out of private hands, there is every reason to believe that the atmosphere in our legislative halls will become purified; and a purer legislature would find less difficulty in establishing for us a purer civil service.

Arena. 34: 458-61. November, 1905.

Possibilities of Government Railroad Control.

John B. Phillips.

Of all quasi-public industries, the railroad is, perhaps, the greatest cause at the present time that is operating to prevent equal opportunities in modern industry. The industries of the country are more dependent upon the railroads than upon any other one condition, and the way in which these are managed is the greatest power to create or destroy democracy in industry.

In the private management of quasi-public industry the one object kept before the mind of the manager is always: "How will I secure the greatest returns?" He is always thinking about what the traffic will bear. If a certain rate will not bring in the greatest amount of money, such a rate cannot be fixed. It is the same in considering the effect of any contemplated improvement in the service. If it does not appear that it will increase the revenue, it is not to be considered. Life-saving devices are not to be thought of if they do not assure a money return. This is well illustrated in the case of the automatic coupler. The railroads would not adopt it till after a quarter of a century of agitation and only when they were finally compelled by Congress. It was a question of social welfare, and the railroad is operated for the purpose of making money, and accordingly social welfare is a secondary consideration.

Under government control it is reasonable to expect that in the operation of the railroad the effect on national welfare as well as the mere earning capacity of the business would be considered. It is quite possible to imagine cases in which the money return might in some measure be sacrificed for the benefit of the nation as a whole. This is the way the post-office is managed at present. It is better that there should be a slight deficit and that it be made up by general taxation than that the rates of postage should be

raised to make the post-office a self-supporting institution. One of the interesting cases illustrating this point is that of the local *rundreise* tickets in Switzerland. In that country it is possible to get a ticket good on all railroad and steamboat-lines, limited to two weeks or one month, for ten and twelve dollars respectively. It is possible that this price does not pay the expense of carrying the passenger, but the prosperity of that country is largely dependent upon the amount of foreign travel and therefore the importance of selling tickets so as to encourage this is the same as cheap postage in the United States.

At present in the United States there is little thought of the social effects that may be produced by freight-rates. In adjusting the rates at which various commodities are to be carried, it is wise to consider the social importance of the commodities. For carrying some things the rate should be very low, while in the case of others whose social necessity is not so great the rate can be kept higher. It has been pointed out by some thinkers that there are commodities that are so indispensable to the welfare of the population that they should be supplied at a minimum of cost. The government has provided some things that are of transcendent importance to the welfare of the community. Among these is a supply of pure water. It may be that there are other commodities that should be provided at the lowest possible cost on account of their importance and among them might be mentioned coal. It has been argued that coal should be transported at a very low price.

With government control of the transportation industry, the rate for carrying this commodity could be fixed in some measure according to its social effects. It could be placed very low and the deficit made up by a higher rate on some other commodity. If the rate for carrying coal had been fixed so low that it would not yield any profit to the railroad companies, they would not have bought up the coal-lands in Pennsylvania at so high a price in the hope that they were to make fortunes by carrying the coal to the seaboard. It is a matter of common knowledge that the rail-

road companies in the anthracite regions purchased these lands at more than they were worth in the hope that by monopolizing the outlet from the mines they would be able to control the price of coal. They paid so much for the lands that some of the companies have not been able to pay any dividends to their stockholders. The attempt to get money for dividends by various methods of curtailing expenses in the mines is what led to the disastrous coal-strike. All this trouble might, perhaps, have been avoided if there had been government control of rate-making and a rate for the transportation of coal placed at so low a figure that there would have been little or no profit to the companies in securing a large business in carrying that commodity. Between managing a quasi-public industry like the railroad to secure the largest financial return and managing it to secure the greatest social welfare, there seems to be an irrepressible conflict.

It is important that the people should make their influence felt in the control of those forces that have most to do with their social and industrial welfare. At the present time when quasi-public industries are wholly under private control, it is difficult to do this. Devices to prevent loss of life have not come as rapidly as the public has thought they were needed. Frightful railroad accidents entailing great loss of life are of frequent occurrence. On January 8, 1902, there was an accident on the New York, New Haven and Hartford railroad in Park avenue tunnel in the city of New York. Seventeen persons were killed and thirty-four injured. The accident was caused by the tunnel being full of smoke at the time. It has been full of smoke for years. At once a strong public sentiment developed demanding that the only means by which in the future such casualties might be prevented be immediately adopted by the railroad company. This is the equipment of the line in the city with electricity. The company proceeded to investigate. Nothing has been done about it as yet. It is reported that the road will soon be equipped with electricity, but no definite date has been fixed. Under government control it is pos-

sible that this improvement might have been introduced much earlier. There ought to be some way in which public sentiment might make itself felt in cases of this kind without being obliged to await the pleasure of a corporation in so important a matter as that of safeguarding the lives of the people.

If the government interfered more largely in the management of railroads there would be a check on the wastes that are so common in that industry. There are instances of the duplication of railroad lines not for the legitimate purpose of transportation but for the purpose of selling out to the competing company. The best example of this is the West Shore railroad in the state of New York. This road was not built for the purpose of carrying freight or passengers primarily, but for the purpose of selling out to the New York Central or sharing in the profits of a pool. For the first year or so after it was finished passengers were carried at very low rates as was also freight. The Central had to compete. At length it decided to buy out the West Shore and thus the rate-war came to an end. Here was a great waste of labor and capital in the building of a new railroad that was not needed. Energy was taken from productive industries and used to injure another industry. Government control would have prevented this waste.

Government control of railroads might be such as to guarantee that all possibilities of industry along the line of the road would have a chance to be developed. Under the present system of privately managed roads it is possible for the manager to ignore completely the desires of certain localities and take no steps to secure the development of industry there. A railroad manager may be anxious to sell the stock of his company at a high price and after a few years leave the road entirely in the hands of other owners. To do this he will curtail operating expenses and cut down the amount of money for improvement and thus allow the road to deteriorate, but will meantime be able to pay larger dividends to the stockholders and thereby raise the

value of the stock. Persons anxious to develop industry along the line are made to suffer for the sake of the speculator in railroad stock.

In modern private industry it can hardly be expected that the affairs of a large corporation will be so managed as not to give some patrons an advantage over others. The railroads are immense corporations competing with each other to secure business and earn dividends for their stockholders. More than in anything else the railroad manager is interested in the quotations of the stock of his company as they appear from day to day in the Wall street reports. A good showing there is what assures him his position and also his standing in the railroad world.

Pressed as such men constantly are by fierce and relentless competition, they are always on the alert to secure new business or to increase old. Giant corporations are endeavoring to secure special rates from the transportation lines. Some of the combinations are stronger than the others and can therefore bring a greater pressure to bear on the railroad companies. The result has usually been that the larger corporations have succeeded in getting special reduced rates from the transportation companies. In this way they have been able to starve out their competitors who have been compelled to pay higher rates for their transportation.

It is well known that many trusts are in large part the creation of discriminating railroad rates. In the histories of the Standard Oil Company much of the strength and prosperity of this combination is attributed to its ability to secure rebates from the railroads. No independent refiner can compete with the Standard if he does not have the privilege of shipping his oil at as low rates as this company. The rebate is said to be still in existence and in cases where it is not the rates are so fixed as to favor the Standard.

Even if the railroad companies would abandon the practice of granting rebates, this would not guarantee an equal opportunity to shippers. There is nothing to prevent a trust from getting control of a railroad. When a trust gets con-

trol of a road it can make such rates as it chooses. High rates would destroy the opportunity of the independent producer and also the possibility of a rival combination to the trust. The Standard Oil Company is at present represented on the boards of directors of nine great American railroads. At the present rate of profit for a few years more, this trust will be able to secure a controlling interest in most of the great railway systems of the country. Thus intrenched, its power would be well-nigh impregnable.

When railroads are under private control, it will be necessary for them to transport goods at a lower rate between competing points than between points from which there is but one railroad. This leads to unfair discrimination between places. The cities at the competing points will grow at the expense of smaller places along the line. Farm land becomes less valuable and manufactures will not be established at places where there is no railroad competition. This condition puts enormous power in the hands of the railroad manager. Sometime ago freight rates between the Colorado cities of Denver and Boulder were fixed so high that merchants in Boulder hauled their goods from Denver in wagons, a distance of twenty-nine miles. This condition of affairs did not tend to encourage the growth of Boulder.

With the combination of railroads into great systems the rate-making power has also become concentrated. At the present time it is said that the freight-rates between all points west of the Mississippi river are made by five men. The power therefore of these five men in determining the development of this part of our country is incalculable.

North American. 158: 294-303. March, 1894.

Natural Monopolies and the Workingman. Richard T. Ely.

There are various undertakings which are monopolies by virtue of their own inherent properties. Recent discussions have made these businesses well known. They are railways,

telegraphs, telephones, canals, irrigation works, harbors, gasworks, street-car lines, and the like. Experience and deductive argument alike show that in businesses of this kind there can be no competition, and that all appearances which resemble competition are simply temporary and illusory.

The policy which in the United States has heretofore been pursued with respect to these businesses has been to turn them over to private corporations and to encourage attempts at competition. There are exceptions which prove the rule. The postoffice has from the start been a government undertaking, and, in the East, water-works have generally belonged to cities. A few cities have owned gas-works, and there may be some two hundred cities in the United States owning electric-lighting plants.

The results of the policy are now clearly manifest. First, we observe vast waste. As these businesses are non-competitive, every attempt to force competition upon them means a waste of a great amount of labor and capital. One railway manager claims that if the railways of the country were operated as a unit, the saving would be \$200,000,000 per annum. This may be an exaggerated estimate, but the waste is enormous; and when we begin to estimate what it has been in the past in railways alone in the United States, we at once run up into the hundreds of millions.

A second result of the policy advocated, which now appears plainly, is the enormous and unprecedented inequality in fortunes in the United States. A large proportion of our mammoth fortunes can be traced to this false policy. Had the post-office been private property, we would have had a still larger number of multi-millionaires who would have absorbed a large proportion of the benefits of improvement in that business, the advantages of which have, through public management, accrued to the people at large. Wherever railways have been from the beginning public property, we notice the absence of the so-called "railway magnate." Political sages, like Aristotle, have in all ages told us that excessive inequality of fortune is a social danger, and especially so in a republic.

A third result of the policy mentioned is a growth of artificial monopolies. Businesses which are not in themselves natural monopolies, have, through favoritism shown by railways and other natural monopolies, themselves become monopolies. Perhaps no better illustration on a small scale could be offered than that which may be seen in Chicago in the transportation of baggage and passengers from one railway station to another. It costs now fifty cents to ride from one railway station to another in the only omnibus line whose agents have access to passengers; whereas, if the business were not an artificial monopoly, omnibuses would take passengers from one station to another for ten cents, if not for five. The way these natural monopolies under private management foster artificial monopolies can be seen even in small things, as when an employee of a railway unlawfully drives newsboys from the sidewalk in front of the railway station, in order that the news agent in the station may be secure in his monopoly.

A fourth result is seen in the dependence of the rest of the community upon those who furnish services or commodities of the kind which fall under the designation, "natural monopoly." As these services and commodities are indispensable, those who furnish them can too often dictate their own terms. Residents of cities frequently have to pay street-car companies to make extensions which would be profitable to the street-car companies, without any bonus. The people of the United States were dependent upon railway managers for cheap fares to the World's Fair at Chicago, which cost so many millions of dollars. In so far as the railway managers thought low fares meant increased net earnings, they were reluctantly granted; not otherwise, no, not even as a matter of grace. The people have built many of these railways in subsidies and land grants, but they had not on that account any effective rights with respect to rates. Their relation is one of dependence, and the railways exercise such paternalism as they see fit, the people having abandoned the principle of self-help in railway management. Farmers are dependent on railways to enable

them to market their own products and, on the other hand, to bring them their supplies. Workingmen by the hundred thousand are dependent upon these monopolies for wages.

A change of policy with respect to businesses of the kind mentioned is advocated. It is laid down as a general principle that non-competitive businesses should be owned and managed by the government, either national, state, or local, and that competitive businesses are the domain of private industry. As it is not a question, with respect to the business mentioned, whether we will have competition or not, but only a question whether we shall have private or public monopoly, public monopoly is preferred to irresponsible private monopoly. The history of the world teaches us that private monopoly is a menace to the public. Men are not good enough to be intrusted with such a depotism as that which monopoly confers.

The change in policy advocated with respect to natural monopolies would go a long way towards the abolition of special economic privileges. The receipt of unearned income is a general expression which covers nearly, if not quite, all peculiar economic privileges, for economic privilege means the opportunity to gain excessive returns.

A further aim which, it is claimed, the reform advocated would promote is the elevation and purification of public life. The greater proportion of corruption in public life is connected directly or indirectly with natural monopolies. It is absolutely necessary that some control should be exercised over these, but those in charge of these monopolies attempt to escape this control. Sometimes they are unjustly attacked by legislatures, and they use bribery and corruption to defend themselves against injustice; and sometimes they use bribery and corruption to ward off legitimate regulation. Aggression sometimes proceeds from the one source, and sometimes proceeds from the other, but the result is that we have become involved in a vicious circle of corruption proceeding from monopolistic undertakings.

Government ownership and administration of these businesses would tend to the simplification, and therefore to the

improvement, of government. Private ownership necessitates endless legislation; and if all laws on our statute-books which have been placed there by such ownership should be removed, the lawbooks of the country would begin to look comparatively lean. How brief and simple is the legislation concerned with our post-office compared with that which deals with railways, for example! Then how largely is litigation connected with private ownership! Remove all litigation peculiar to private ownership and management of monopolies, and the courts would not be so far behind in their cases. Another misfortune is that so large a proportion of the talent of the country is absorbed by private enterprises. Public life does not offer corresponding inducements to capacity.

These are general grounds for the change from private to public ownership, and the workingman is affected, inasmuch as he belongs to the social body. But we must consider the subject in its more immediate relations to the workingman. It is important to show that this is a reform to which he should direct his attention, rather than to many others which now absorb an undue proportion of his energies.

We are speaking of the wage-earner—the receiver of wages. The monopolist is not likely to be a good employer of labor. His power is so great, and that of a single wage-earner so small in comparison, that the former is exposed to the danger of becoming an arbitrary and arrogant employer. Even when the employees of monopolists unite in labor organizations, their power is not great enough so that they can enter upon labor contracts upon an equal footing with their employers. The outcome of recent railway strikes in the United States demonstrates this sufficiently.

It has been held by some that it should be made a penal offense for those who are employed by railway corporations and other corporations of the kind with which we are dealing, to strike, because the interests of the general public are involved. There can be no question that the general public

is concerned, for the services rendered by undertakings of the class called "natural monopolies" are necessities in the modern business world. But, if these wage-earners—the most important and numerous group of wage-earners in the country—cannot resist oppression and injustice in the only way in which resistance is effective, namely, by strong combination and united action, then they are virtually reduced to slavery. The only way out of the dilemma is government ownership. If government is the employer, then the employed have representation in the controlling body ample to protect their interests. It is perfectly legitimate for the people to say: "As we guarantee to you equitable treatment and fair wages, we insist that you shall serve the public faithfully like soldiers. This is only a just return for what you receive."

It is claimed that the policy advocated would tend to steadiness of industrial development. At present, times of great prosperity are followed by times of stagnation, and during the latter hundreds of thousands and even millions seek labor in vain. Government could make far-reaching plans for the development of those industries which we call natural monopolies, and execute them regularly. A large industrial field for government as well as for private enterprise gives a certain balance to the whole industrial life which must otherwise be wanting. It is to be noticed, also, that a time which is unfavorable for private industry is often a time most favorable for the public undertakings, because labor is cheap and capital also, as a rule. Moreover, government credit does not break down as does that of the vast private corporations with which we are dealing. Reflect upon the great railway corporations which have recently gone into the hands of receivers in the United States! It is unquestionable that enterprises of the sort which we have been considering have, in their failure, had not a little to do with the present crisis.

We may look at crises and consequent industrial depressions from a different point of view. What does stagnation in business mean but absence of exchange? The wheat-

grower in Iowa wants shoes, and the shoemaker in Massachusetts wants wheat, but they are not able to supply each other's demands, and both suffer. Now, cheaper and better transportation would facilitate exchanges and thus tend to promote general and continuous prosperity.

The private monopolist fails conspicuously in protection to life and limb, whereas government in this respect manifests decided superiority. Government is peculiarly sensitive in regard to human life. If a government building collapses and destroys a number of human lives, we are astonished and indignant, and those in any way responsible for the disaster are placed in a most unfortunate position; but we take it as a matter of course that railways should every day in the year destroy human life needlessly. In proportion to the number travelling, there are thirteen times as many accidents in the United States as in Germany, where government ownership of railway obtains, and six or seven times as many accidents to employees in proportion to the total number. And no wonder! The first thing which attracts attention in Germany is the careful protection to life and limb. Accidents of daily occurrence in Chicago are an impossibility in Berlin, a city of equal size. Contrast the efforts of the United States to save life as seen in our truly admirable life-saving service on our coasts with the conduct of those railway presidents who rush to Washington and to our state capitals to prevent the passage of laws to compel the railways to use well-known and approved safety appliances!

It is claimed that there is greater freedom in the service of government than in the service of the vast corporations which manage natural monopolies. And the freedom of the employed may be still further increased by better civil-service regulations. The nobility of public service is of importance to the wage-earner of every grade. The uniform of government is an honor, while the livery of private service is considered a badge of inferiority. It is public service which has developed the great leaders of our civilization. Private service could never give us a Washington or a

Lincoln. Government ownership implies use for general social purposes, and not merely exploitation for dividends.

In determining railway fares under government ownership, the question has to be asked, not merely, What will be the net financial returns? but, What will be the total social effect? Recently, what is called the "zone-system" has been introduced in Berlin and vicinity, to encourage a decentralization of population. Without attempting to describe the zone system, it may be said that it implies a reduction of railway fares. It was not merely to ask whether the reduction in fares would yield large net returns, but whether the result would be beneficial, because the railways were public property. It has been found desirable in some instances even to sacrifice a pecuniary return for social advantage of a different sort, which far more than counterbalances the sacrifice in money.

The purchase of the railways would give the property far greater value than the government bonds issued to pay for them, because the consolidation of the railways would at once increase enormously their value. The increase in value would be equal to the saving capitalized, and if we reduce the estimate of \$200,000,000 per annum by one-half, we will still have a capitalized gain of \$2,500,000,000, even if we capitalize the same at four per cent. We have a further saving which results from the superior credit of government, for this superiority would lead to a vast reduction in interest charges whenever the bonds could be refunded.

Arena. 4: 273-92. August, 1891.

Should the Nation Own the Railways? C. Wood Davis.

First would be the stability and practical uniformity of rates now impossible, as they are subject to change by hundreds of officials, and are often made for the purpose of enriching such officials. State and federal laws have had

the effect of making discriminations less public and less numerous, but it is doubtful if they are less effective in enriching officials and their partners, although it may be necessary to be more careful in covering tracks. That they are continued is within the cognizance of every well-informed shipper, and are made clear by such cases as that of Counselman and Peasley, now before the United States Supreme Court. Counselman and Peasley—one a large shipper and the other a prominent railway official—refused to testify before a United States grand jury upon the plea that to do so might criminate themselves; the federal law making it a criminal offence to make or benefit by discriminating rates. Counselman had been given rates on corn, some five cents less per hundred pounds than others, from Kansas and Nebraska points to Chicago.

The outrageous character of this discrimination will appear when we reflect that five cents per one hundred pounds is an enormous profit on corn that the grower has sold at from eighteen to twenty-two cents per one hundred pounds, and that such a margin would tend to drive every one but the railway officials and their secret partners out of the trade, as has practically been the case on many western roads. Doubtless such rates are sometimes made in order to take the commodity over a certain line, and there is no divide with the officials; but the effect upon the competitors of the favored shipper and the public is none the less injurious, and such practices would not obtain under national ownership, when railway users would be treated with honesty and impartiality, which the experience of half a century shows to be impossible with corporate ownership.

Referring to the rate question in their last report, the Interstate Commerce Commission says: "If we go no farther than the railroad managers themselves for information, we shall not find that it is claimed that railroad service, as a whole, is conducted without unjust discriminations."

"If rates are secretly cut, or if rebates are given to large shippers, the fact of itself shows the rates which are charged

to the general public are unreasonable, for they are necessarily made higher than they ought to be in order to provide for the cut or to pay the rebate."

"If the carrier habitually carries a great number of people free, its regular rates are made the higher to cover the cost; if heavy commissions are paid for obtaining business, the rates are made the higher that the net revenues may not suffer in consequence; if scalpers are directly or indirectly supported by the railroad companies, the general public refunds to the companies what the support costs."

The Commission quotes a Chicago railway manager as saying: "Rates are absolutely demoralized and neither shippers, passengers, railways, or the public in general make anything by this state of affairs. Take passenger rates for instance; they are very low; but who benefits by the reduction? No one but the scalpers. . . . In freight matters the case is just the same. Certain shippers are allowed heavy rebates, while others are made to pay full rates. . . . The management is dishonest on all sides, and there is not a road in the country that can be accused of living up to the interstate law. Of course when some poor devil comes along and wants a pass to save him from starvation, he has several clauses of the interstate act read to him; but when a rich shipper wants a pass, why he gets it at once."

From years of ineffectual efforts on the part of state and national legislatures and commissions to regulate the rate business, it would appear that the only remedy is national ownership, which would place the rate-making power in one body, with no inducement to act otherwise than fairly and impartially, and this would simplify the whole business and relegate an army of traffic managers, general freight agents, soliciting agents, brokers, scalpers, and hordes of traffic association officials to more useful callings while relieving the honest user of the railways of intolerable burthens.

With the government operating the railways, discriminations would cease, as would individual and local oppression; and we may be sure that an instant and absolute divorce would be decreed between railways and their officials on one

side, and commercial enterprises of every name and kind on the other.

There are but three countries of any importance where the railways are operated by corporations permitted to fix rates, as in all others the government is the ultimate rate-making power: these are Great Britain, Canada, and the United States; and while the British government exercises a more effective control than we do, there are many and oppressive discriminations, and complaints are loud and frequent, and English farmers find it necessary to unite for the purpose of securing protection from corporate oppression, as is shown by the following from the Liverpool Courier of January 29, 1891.

LANCASHIRE FARMERS AND RAILWAY RATES.

After the counsel given them yesterday by Mr. A. B. Forwood, of Ormskirk, it may be expected that the Liverpool District Farmers' Club will be on the watch for tangible evidence of their grievances against the railway companies. . . . Under certain circumstances competition operates to the advantage of the public, and rival carriers are constrained to convey goods from place to place at moderate charges; but where a company is not held in check, the tendency is for rates to advance. In many cases, too, special interests of the companies are promoted at the expense of localities, and even individuals are subjected to the wrong of preferential charges. (There are no complaints in Britain that these discriminations are practised for the purpose of enriching the officials.) Hence the necessity for the Railway Commission to regulate the magnates of the iron road, who when left without restraint pay little regard to interests other than those of their shareholders.

Although Mr. Acworth fails to mention this phase of English railway administration, it would appear that the evils of discrimination are common under corporate management in Great Britain, and that they are inherent to and inseparable from such management; and that the questions of rates, discriminations, and free traffic in fuel can be satisfactorily adjusted only by national ownership, and if for no other reasons such ownership is greatly to be desired.

The failure to furnish equipment to do the business of the tributary country promptly is one of the greater evils of corporate administration, enabling officials to practise most injurious and oppressive forms of discrimination, and is one that neither federal nor state commission pays much

attention to. With national ownership a sufficiency of cars would be provided. On many roads the funds that should have been devoted to furnishing the needed equipment, and which the corporations contracted to provide when they accepted their charters, have been divided as construction profits or, as in the case of the Santa Fe, Union Pacific, and many others, diverted to the payment of unearned dividends, while the public suffers from this failure to comply with charter obligations; yet Mr. Dillon informs us that the citizen commits an impertinence when he inquires why contract obligations, which are the express consideration for the exceptional powers granted, are not performed.

Another great advantage which would result from national ownership would be such an adjustment of rates that traffic would take the natural short route, and not, as under corporate management, be sent around by the way of Robin Hood's barn, when it might reach destination by a route but two thirds as long, and thus saving the unnecessary tax to which the industries of the country are subjected. That traffic can be sent by these round-about routes at the same or less rates than is charged by the shorter ones is *prima facie* evidence that rates are too high. If it costs a given sum to transport a specific amount of merchandise a thousand miles, it is clear that it will cost a greater sum to transport it fifteen hundred; and yet traffic is daily diverted from the thousand mile route to the fifteen hundred one, and carried at the same or lower rates than is charged by the shorter line. It is evident, that if the long route can afford to do the business for the rates charged, that the rates charged by the shorter are excessive in a high degree.

Under government management, traffic would take the direct route, as mail matter now does, and the industries of the country be relieved of the onerous tax imposed by needless hauls. Only those somewhat familiar with the extent of the diversions from direct routes can form any conception of the aggregate saving that would be effected by such change as would result from national ownership, and which

may safely be estimated as equal to two and a half per cent. of the entire cost of the railway service, or \$25,000,000 per annum.

With the government operating the railways there would be a great reduction in the number of men employed in towns entered by more than one line. For instance, take a town where there are three or more railways, and we find three (or more) full-fledged staffs, three (or more) expensive up-town freight and ticket offices, three (or more) separate sets of all kinds of officials and employees, and three (or more) separate depots and yards to be maintained. Under government control these staffs—except in very large cities—would be reduced to one, and all trains would run into one centrally located depot; freight and passengers be transferred without present cost, annoyance, and friction, and public convenience and comfort subserved, and added to in manner and degree almost inconceivable.

Economies which would be affected by such staff reductions, would more than offset any addition to the force likely to be made at the instance of politicians, thus eliminating that objection; such saving may be estimated at \$20,000,000 per annum.

With the nation owning the railways the great number of expensive attorneys now employed, with all the attendant corruption of the fountains of justice, could be dispensed with; and there would be no corporations to take from the bench the best legal minds, by offering three or four times the federal salary; nor would there be occasion for a justice of the Supreme Court of Kansas to render a decision that a corporation chartered by Kansas for the sole purpose of building a railway in that state has the right and power under such charter to guarantee the bonds of corporations building railways in Old or New Mexico, and shortly after writing such decision be carted all over the seaboard states in one of the luxurious private cars of such corporation. Under national ownership such judges would pay their travelling expenses in some other way, and be transported in the ordinary manner, and not half as many judges would

travel on passes. There are many judges whose decisions any number of passes would not affect; but if passes are not to have any effect upon legislation and litigation, why are congressmen, legislators, judges, and other court officials singled out for this kind of martyrdom? If the men who attain these positions remained private citizens, would passes be thrust upon them?

Although the reports of the Victorian Commissioners show, in detail, all the expenditures of railway administration, yet not one dollar is set down for attorneys' salaries or for legal expenses, and it is presumed that the ordinary law officers of the government attend to the little legal business arising, and yet judging from reports made by Kansas roads, the expenditures of the corporate owned railways of the United States for attorneys' salaries and other legal expenses, are at least two per cent. of the entire cost of operating the roads, and yearly aggregate some \$14,000,000, all of which is taken directly from railway users, and is a tax which would be saved under national ownership, as United States district attorneys could attend to such legal business as might arise. This expenditure is incurred in endless controversies between the corporations, in wrecking railways, in plundering the shareholders, in contending against state and federal regulation, in manipulating elections and legislations, and in wearing out such citizens as seek legal redress for some of the many outrageous acts of oppression practised by the corporations. Once the government was in control, these lawyers would be relegated to some employment where they would do less harm, even if not engaged in a more honorable vocation than that of trying to defeat justice by the use of such questionable means as the control of the vast revenues of the corporations place in their hands.

Is it possible that the railway companies can legitimately use anything like \$14,000,000 yearly in protecting their rights in the courts?

With the government operating the railways, every citizen riding would pay fare adding immensely to the revenues.

Few have any conception of the proportion who travel free, and half a century's experience renders it doubtful if the pass evil—so much greater than ever was the franking privilege—can be eliminated otherwise than by national ownership. If all were required to pay for railway services, as they are for mail services, the rates might be reduced ten per cent. or more, and the corporate revenues be no less, and the operating expenses no more. In no other country—unless it be under the same system in Canada—are nine tenths of the people taxed to pay the travelling expenses of the other tenth. By what right do the corporations tax the public that members of Congress, legislators, judges, and other court officials and their families may ride free? Why is it that when a legislature is in session passes are as plentiful as leaves in the forest in autumn?

In every conceivable way are the net revenues of the corporations depleted, and needless burthens imposed upon the public, but one of the worst is the system of paying commissions for the diversions of traffic to particular lines, often the least direct. The more common practice is to pay such commissions to agents of connecting lines where it is possible to send the traffic over any one of two or more routes, and the one which may, by the payment of such commission, secure the carrying of the passenger (or merchandise) may be the least desirable, and the one which would never have been taken but for the prevarications of an agent bribed by a commission to make false representations as to the desirableness of the route he selects for the confiding passenger.

This is but one of many phases of the commission evil, another being that these sums are ultimately paid, not by the corporations, but by the users of the railways, and but for the payment of such commissions the rates might be reduced in like amounts. Aside from commissions paid for diverting passenger traffic great sums are paid for "influencing" and "routing" freight traffic, and these sums, while paid to outsiders, or so-called brokers, are frequently divided with railway officials.

The corporations have ineffectually wrestled with the commission evil, and any number of agreements have been entered into to do away with it; but it is so thoroughly entrenched, and so many officials have an interest in its perpetuation, that they are utterly powerless in the presence of a system which imposes great and needless burthens upon their patrons, but which will die the day the government takes possession of the railways, as then there will be no corporations ready to pay for the diversion of traffic. National ownership alone can dispose of an administrative evil that, from such data as is obtainable, appears to cost the public from \$20,000,000 to \$25,000,000 per annum.

As a rule, American railways pay the highest salaries in the world for those engaged in directing business operations, but such salaries are not paid because transcendant talents are necessary to conduct the ordinary operations of railway administration, but for the purpose of checkmating the chicanery of corporate competitors. In other words, these exceptionally high salaries are paid for the purpose, and because their recipients are believed to have the ability to hold up their end in unscrupulous corporate warfare where, as one railway president expressed it, "the greatest liar comes out ahead." With the government operating the railways, there would be no conflicting interests necessitating the employment of such costly officials whose great diplomatic talents might well be dispensed with, while the running of trains, and the conduct of the real work of operating the roads, could be left to the same officials as at moderate salaries now perform such duties, and consolidation of all the conflicting interests in the hands of the government will enable the public to dispense with the services of the high priced managers now almost exclusively engaged in "keeping even with the other fellow," as well as with the costly staffs assisting such managers in keeping even, and the savings resulting may be estimated at from \$4,000,000 to \$5,000,000 per year.

With national ownership the expenditures involved in the maintenance of traffic associations would be saved, and rail-

way users relieved of a tax that, judging from the reports of a limited number of corporations of their contributions towards the support of such organizations, must annually amount to between four and five million dollars.

Of the six hundred corporations operating railways, probably five hundred maintain costly general offices, where president, treasurer, and secretary pass the time surrounded by an expensive staff. The majority of such offices are off the lines of the respective corporations, in the larger cities, where high rents are paid, and great expenses entailed, that proper attention may be given to the bolstering or depressing the price of the corporation's shares, as the management may be long or short of the market. So far as the utility of the railways is concerned as instruments of anything but speculation, such offices and officers might as well be located in the moon, and their cost saved to the public. The average yearly cost of such offices (and officers) is more than \$50,000, and the transfer of the railways to the nation would, in this matter alone, effect an annual saving of more than \$25,000,000, as both offices and officials could be dispensed with, and the service be no less efficient.

Moreover, with the nation owning the railways, the indirect but no less onerous tax levied upon the industries of the country, by the thousands of speculators who make day hideous on the stock exchanges, would be abrogated, as then there would be neither railway share nor bond for these harpies to make shuttlecocks of, and this would be another economy due to such ownership.

Railways spend enormous sums in advertising, the most of which national ownership would save, as it would be no more necessary to advertise the advantages of any particular line than it is to advertise the advantages of any given mail route. From reports made by railway corporations to some of the Western States, it appears that something over one per cent. of operating expenses are absorbed in advertising, aggregating something like \$7,000,000 per year, of which we may assume that but \$5,000,000 would be saved, as it would still be desirable to advertise train departures and arrivals.

A still greater expense is involved in the maintenance of freight and passenger offices off the respective lines, for the purpose of securing a portion of the competitive traffic. In this way vast sums are expended in the payment of rents, and the salaries of hordes of agents, solicitors, clerks, etc., etc. Taking the known expenditures, for this purpose, of a given mileage, it is estimated that the aggregate is not less than \$15,000,000 yearly, all of which is a tax upon the public, that would be saved did the government operate the railways.

Under government control, discriminations against localities would cease, whereas now localities are discriminated against because managers are interested in real estate elsewhere, or are interested in diverting traffic in certain directions; again, under corporate management, it is for the interest of the company to haul a commodity as far as possible over its own lines (with the government owning all the lines this motive will lose its force), and thus traffic is forced into unnatural channels. For instance: much of the grain from Kansas should find its way to foreign markets via the short route to the Gulf, the distance to tide water by this route being less than half what it is to the Atlantic, yet so opposed to this natural route are the interests of the majority of the corporations controlling the traffic associations, which now dictate to the people what routes their traffic shall take, that the rates to the Gulf are kept so high as to force the traffic to the Lakes and to the Atlantic; and as all the railways leading to the Gulf have lines running eastward, the much lauded corporate competition fails to help out the citizens of Kansas, who are subjected to the domination of the new tyrant denominated a "traffic association." With the nation operating the railways, all this would be changed, and localities favorably located would be able to reap the benefits which such location should give, and should such a condition ever obtain, the farmers of western Iowa will not then ship corn to the drouth-stricken portion of Kansas for fifteen cents per one hundred pounds, while the Kansas corn grower, living within seventy-five miles of the same

market, is charged ten cents per one hundred pounds for a haul one eighth as long. By such rates the railways force the hauling of corn from Iowa to western Kansas, and then force the corn grower of central Kansas to send his corn eastward, the result being two long hauls, where one short one would suffice; but then the corporations would have absorbed less of the substance of the people.

Another, and an incalculable benefit, which would result from national ownership, would be the relief of state and national legislation from the pressure and corrupting practices of railway corporations which constitute one of the greatest dangers to which republican institutions can be subjected. This alone renders the nationalization of the railways most desirable, and at the same time such nationalization would have the effect of emancipating a large part of the press from a galling thralldom to the corporations.

In Victoria, the parcel or express business is done by the government railways, and the rates are not one half what they are with us when farmed out to a second lot of corporations. Space does not permit the discussion or even the statement of the many salutary phases of government control, as developed in the various countries of Europe, and it is not necessary, as there are abundant reasons to be found in conditions existing at home, for making the proposed change. By far the most menacing feature of continued corporate ownership is the power over the money markets which it places in the hands of unscrupulous men, any half dozen of whom can, at such a time as that following the failure of the Barings, destroy the welfare of millions, and plunge the country into all the horrors of a money panic. Whether it be true or not, there are many who believe that a small coterie, who had information before the public of the condition of Baring Brothers and that a block of many millions of American railway securities held by that house were being (or soon would be) pressed upon the market, entered into a conspiracy for the purpose of locking up money and thereby depressing prices in order to secure, at low cost, the control of certain coveted railways. The

railways were secured, and there is not much doubt that they had been lying in wait for such a critical condition of the money markets to accomplish this purpose, which still further enhances their power for evil. With the railways nationalized, not only would there be no temptation for such nefarious operations, but the power of such men over values would be greatly lessened, if not wholly destroyed, as there would be no railway shares for them to play fast and loose with, and as money, instead of being tied up in loans on chromos representing little but water, would seek investment in bona fide enterprises, their operations would have little influence, and would certainly have no such baleful power over the industries of the country, as their ability to affect the value of railway shares—on which such immense sums are now loaned on call—gives them, they being able by locking up a few millions when the money market is in the condition, which obtained at the time of the Baring collapse, to force the calling of loans and the slaughtering of vast numbers of the shares, carrying the control of the railways they covet. If only for the purpose of divesting "The dangerous wealthy classes" of this frightful power, national ownership would be worth many times its cost, and without such ownership a score of manipulators are soon likely to be complete masters of the republic and all its industrial interests; hence, the question reverts to the form stated in the opening of this paper: Shall the nation accept as a master a political party that may be dislodged by the use of the ballot, or shall the republic be dominated by a master in the form of a score of unscrupulous Goulds, Vanderbilts, and Huntingtons, who cannot be dislodged, and who never die?

Assuming that \$30,000 per mile is the maximum cost of existing railways—as shown in *The Arena* for February,—and that there are 160,000 miles, it would give a total valuation of \$4,800,000,000; but that there may be no complaint that the nation is dealing unfairly with the owners of much water, it will be well to add twenty-five per cent. to what will be found to be the outside value of the

railways when condemned under the law of eminent domain, and assuming that \$6,000,000,000 of three per cent. bonds are issued in order to make payment therefor, and it involves an interest charge of \$180,000,000, to which add \$670,000,000, as the cost of maintenance and operation, and \$50,000,000 as a sinking fund, and we have a total annual cost, for railway service, of \$900,000,000 as against a present cost of \$1,050,000,000 (\$950,000,000 from traffic earnings, and \$85,000,000 from other sources of railway revenue) resulting in a net annual saving to the public of \$150,000,000 to which must be added the other various savings which it has been estimated would result from government control, and which, for the convenience of the reader, are here recapitulated, namely:—

Saving from consolidation of depots and staffs.....	\$20,000,000
Saving from exclusive use of shortest routes.....	25,000,000
Saving in attorneys' salaries and legal expenses.....	12,000,000
Saving from the abrogation of the pass evil.....	30,000,000
Saving from the abrogation of the commission system..	20,000,000
Saving by dispensing with high priced managers and staffs	4,000,000
Saving by disbanding traffic associations.....	4,000,000
Saving by dispensing with presidents, etc.....	25,000,000
Saving by abolishing (all but local) offices, solicitors, etc.	15,000,000
Saving of five-sevenths of the advertising account.....	5,000,000
Total savings by reason of better administration.....	\$160,000,000

It would appear that after yearly setting aside \$50,000,000 as a sinking fund, that there are the best of reasons for believing that the cost of the railway service would be some \$310,000,000 less than under corporate management.

That \$6,000,000,000 is much more than it would cost to duplicate existing railways, will not be questioned by the disinterested familiar with late reductions in the cost of construction, and that such a valuation is excessive is manifest from the fact that it is much more than the market value of all the railway bonds and shares in existence.

Mr. John P. Meany, in the *Railway Review* of February 7, 1891, says: "It is safe to assume that the market valuation of the entire \$4,500,000,000 of railroad stock in existence, would not average more than \$30 per share, or, say \$1,350,000,000 in all," and in his *Sun* article he states that fully \$500,000,000 of this stock is duplicated, so that the

"live" stock outstanding is really but \$4,000,000,000, which at \$30 per share would have an aggregate value of \$1,200,000,000. Mr. Meany also states that there are duplications of bond issues amounting to some \$300,000,000 leaving the live outstanding bonds at \$4,500,000,000 and many corporations failing to pay interest, some issues are selling as low as 12 per cent. of par, making it safe to call the average market value of bonds 90 per cent. of their face value, and their aggregate value would be \$4,050,000,000, to which add value of "live" capital stock, \$1,200,000,000, and the total market value of bonds and stock is, \$5,250,000,000, being at the rate of \$32,800 per mile for the 160,000 miles in operation.

Arena. 9: 460-5. March, 1894.

Nationalization of Railroads. Solomon Schindler.

Inasmuch as each person is both a producer and a consumer, it is of the highest possible interest to him that he is served in the easiest, cheapest, and most efficient manner possible. In our present social order, competition used to secure this for him. If one producer took advantage of him, at once a competitor would rise up, and, by underbidding his rival, force him to sell at lower rates.

This same force, which apparently worked so well in thousands of other branches of business, failed, however, to work with the same promptness in regard to railroad transportation. Whenever competition was tried here, it ended in the absorption of the shorter purse by the longer; the railroad remained a monopoly, and the successful monopolist could prescribe his rules and levy taxes like a victorious invader. People are utterly powerless to force a railroad company to acknowledge their rights. Dependent upon railroad facilities, they cannot boycott a railroad and withdraw their custom; the haughty official simply laughs in the face of the public and asks: "What are you going to do about it?"

2. This uncontrollable power of railroad companies makes itself felt in a number of spheres which apparently do not stand in any connection with the office of this agent as common carrier. Slight favors shown by railroad officials to one of two competitors, tip the balance and destroy the chances of the one who is not favored. If one firm can throw its products upon the market more quickly or at cheaper rates than others, it gains such an advantage over the rest that the latter can never prosper. Whoever controls the railroad, controls the market, and although attempts have been made to force railroads into submission by certain laws, all such efforts have turned out complete failures. Unless a firm is backed by sufficient capital to demand its rights, it never gets them from a railroad company, and when they are obtained, such a powerful firm is generally satisfied to bar out other applicants from obtaining the same privileges.

Such a state of affairs, detrimental to the very principles of the opportunists, should not and could not exist if a government of the people, for the people, and by the people, managed the railroads. If, to-day, the mail department should favor a certain business house and not grant the same privilege to the rest of the people, would not such an arbitrary action be reproved at the very next election? In railroad matters, however, the people have no voice, because they have not the means of rectifying matters.

4. A look at railroad maps will show that railroad systems have rarely accommodated themselves to the country, but that the country had to accommodate itself to them. The people never had a decisive voice in determining the routes of a road. Cities, which formerly controlled vast business interests, have been gradually reduced to second or third rank, simply because railroad companies gave undue advantages to other cities, which began to prosper on that account. It is a fact which cannot be ignored, that the city of Boston, although possessing fine harbor facilities, has been reduced in her commercial activities solely through the favors granted by railroad companies to New York.

This could never have happened, had the management of the railroads been in the hands of the government. Of course, it is no use crying over spilt milk, but we must not fail to notice that the railroad netting is spreading its meshes more and more over the land; that electricity is bound to multiply railroad facilities (successful trials having been made already of carrying freight on electric cars), and thus the powers of the parties who control transportation will grow in proportion. Learning from past experience, would it not be wise to take time by the forelock and leave the control of the arterial system of the nation in the hands of the government rather than in those of irresponsible parties?

Arena. 37: 113-20. February, 1907.

Railway Experience of Germany. Frank Parsons.

The argument submitted by the Cabinet to the Prussian Parliament in 1879, along with bills for the nationalization of the railways, is probably the most important document in railway history. It represents the best thought of Bismarck and his cabinet and all they had gathered from the chambers of commerce and hundreds of books, pamphlets and addresses that had been issued on the subject during years of earnest discussion. A few quotations will give the reader some idea of the weight and thoroughness of this famous document.

The Cabinet said:

"The inconveniences caused by the private management of railroads in consequence of the existence of a number of different enterprises of doubtful solidity and restricted working capacity; the abuse of their privileged position by their managers; the oft-recurring resistance to reforms of public utility; the complication and for the most part arbitrary differences among the various administrative and working arrangements; the intricacy of the tariffs; the quarreling and extravagant expenditure accompanying the bitter

competition existing among such a number of corporations, have altogether caused the widespread injury to the public welfare that is inseparable from an extended private management of railroads.

"The attempts to bring about reform by laws have shown the futility of hoping for a satisfactory improvement through legal measures, without trenching materially on established rights and interests."

"State ownership is necessary," argued the Cabinet, "to attain unity and economy under conditions in harmony with the public welfare and to secure direct attention to public interests which do not permanently find sufficient furtherance and protection where the railroads are in the hands of private corporations whose object is gain. . . . The inadequacy of private management and state supervision becomes daily more obvious."

The Cabinet dwelt at length upon the advantages of unity, the waste of having fifty separate railway managements, etc. Large savings in official salaries would result from unity of management. The army of employes in the tariff and accounting offices could also be reduced one-half. "The reasonable utilization of cars" was interfered with "by the multiplicity of owners, and the working capacity of the rolling-stock greatly reduced in consequence," one-third of the travel being made with empty cars. The waste in haulage by circuitous transportation was also shown. "Freight is carried over roads exceeding in length by 100 per cent. the shortest routes."

"But," said the Cabinet, "the union of the railroads in the hands of one private enterprise would be absolutely inadmissible. Although the disadvantages and dangers of an unsystematic division and wasteful competition would thus be avoided, to place the complete monopoly of all means of transport in the hands of one enormous profit-seeking corporation would be antagonistic to every public interest concerned, as will be apparent to all. Already in those countries where private railroad management is the rule, and where the technically and economically justified

process of absorption by the powerful corporations of the smaller and less important railroads prevails, their course hitherto, the dangerous influence which these corporations have acquired over the whole public existence, the reckless pursuit of the profits of their monopoly and their chartered rights within the districts they serve, and the impotency of government supervision compared with their far-reaching, well-organized power, controlling all interests, together cause the gravest apprehensions for the welfare of the country, and even for its political independence."

"Only the union of complete ownership and unrestricted management in the hands of the state can fully secure the fulfillment of the task devolving on the government with regard to the direction of railroad matters. Only by the adoption of this system can the economical advantages of united management be obtained without the monopoly of transportation compromising the advancement and protection of the interests of the community. The great advantages of complete unity in the management and operation of the railroads are so necessary to the economical interests of the country that the only question left is whether a monopoly by the state or by private corporations is to be regarded as the most advantageous forms of unity. If a private monopoly, as just described, is wholly incompatible with the proper protection of public interests, but would render all business requiring transportation dependent on the interests and views of a private enterprise, then a government monopoly, one single transportation establishment conducted by the state for all the railroads of the country, appears to be the only possible form in which complete unity of operation can be accompanied by the protection of the interests of the community."

"The railroads are public highways and can only be left to unrestricted private control so far as public interest permits. The very nature of a public highway requires that its use must be secured to everybody on equal terms."

"It is the duty of the government to see that the people have fair rates and equal treatment; to protect the public

against arbitrary, fluctuating, complex and unjust tariffs; to demand safe transportation for the public and ample facilities to guard the customs duties against neutralization by railway concessions to foreign goods. For all these reasons the government must control the railroads, but the conflict of interest between the private railways and the public makes such control very difficult. The companies seek profit and often try to deflect the law instead of giving cordial support and full effectiveness to government regulation in the public interest. On the other hand it is a very delicate question how far the government has a right to exert control for the public good against the financial interests of the railways."

"More than all," said the Cabinet, "the principle of equality, the impartial treatment of all shippers, is endangered by the operation of railroads by private corporations. The principles of the publicity of the rates and the equal treatment of all shippers, which are embodied in the railroad legislation of all countries, are liable, as experience has shown, to be circumvented on account of the competing interests of railroads, and also by individual interests which have influence with the managements. The granting of these secret advantages in transportation in the most diversified ways to individual shippers, and in particular the so-called rebate system, is the injurious misuse of the powers granted to railroad corporations. It renders government control of the rates impossible, makes the competition between the different lines, as well as that of shippers dependent on them, dishonorable and unfair, carries corruption among the railroad employés and leaders more and more to the subordination of the railroad management to the special interests of certain powerful cliques. It is the duty of the government to oppose this evil, to uphold the principle of the equal treatment of all shippers, and to enforce the legislative regulations on this subject. The importance of this problem is equaled only by the difficulty of its solution. It suits the interests of the railroad proprietors to favor large shippers in preference to the smaller ones,

and, by means of secret favors of all kinds, to divert the most important shipments from the competing lines. The opportunities of securing secret favors to particular shippers are so manifold that their effectual lasting hindrance by means of the state supervising power is impossible. Rebates on freights may be made through a second or third party by means of the secret interposition of agents who are appointed for the purpose of regulating and securing the business of a certain competing route through the mediation of the foreign railroads concerned, as well as by a prearranged connivance in admitting or allowing fictitious or unfounded claims, etc., and so may be covered and withdrawn from public as well as official control."

"The organization of a joint-stock company does not prevent the possibility of the operation of a railroad being brought into a condition of complete dependence on some other industrial undertaking, nor does it insure that the directors of a private railroad company shall not be interested in a series of other enterprises whose successful operation is dependent upon their business relations with the railroad, so that the management of the road may be directed and governed, not so much by its own interest as in the interest of some other business, often enough opposed to that of the road. Against such an organization, which, by reason of its abundant means, and by effective channels, often leads astray and corrupts public opinion, even the influence of the government is powerless, the principle of equitable treatment or all railroad shipping interests becomes an empty form and legislative regulation nothing but a meaningless phrase."

Arena. 7: 58-63. December, 1892.

Government Ownership of Railways. T. V. Powderly.

The Interstate Commerce Law is a half-way measure; it but lances the sore where amputation is necessary; intended to control, it is itself controlled, and the summing up

of a railroad manager before the Interstate Commerce Commission clearly demonstrates the utter worthlessness of that institution. It reads:—

Rates are absolutely demoralized, and neither shippers, passengers, railways, or the public in general make anything by this state of affairs. Take passenger rates, for instance; they are very low, but who benefits by the reduction? No one but the scalpers. In freight matters the case is just the same. Certain shippers are allowed heavy rebates, while others are made to pay full rates. . . . The management is dishonest on all sides, and there is not a road in the country that can be accused of living up to the Interstate law.

Governmental control of railroads has not succeeded and never will succeed. So long as it is in the power of a board of directors to increase stocks (all water), issue bonds, and give rebates in secret, the people will have to pay for all the water and the interest on the bonds. Favors are shown to trusts and combines; the trusts and combines are made up of the directors and stockholders of the railroads; they secretly allow rebates to their favorites, such institutions as have railroad directors on the roll of stockholders having an undoubted advantage over their competitors. No system of governmental control can reach the offenders. Public control is inconsistent with the idea of private ownership, and private ownership of public institutions is not consistent with well-founded principles of public policy and welfare. Public control without public ownership is an impossibility. What the government has a right to control it has a right to own and operate. Ownership must precede control, and the question must be solved in a very short time, or those who own the railroads will own the government.

The enormous sum of money annually expended by the railroads to fee their lawyers would be saved if the governments owned the roads; the interminable lawsuits, in which the railroad official always feels that his road must win, would cease to lumber the court records. Life would be held to be more sacred than now, and the great difference between the number of killed and wounded in the United States, and countries where the railroads are under government control or ownership, would not be so great. Strikes would be at an end under government ownership; for the

employees, in common with other citizens, would be the employers then, and it would be to their interest to see that the management of railroads was as nearly perfect as possible. Being managed for the public good instead of for private gain, it would be in the interest of good government to establish the eight-hour work day, wherever practicable, on railroads. The employment of more men (steady employment at that), a better service, and a reduction of the dangers of railroad travel to the minimum would follow government ownership.

Public. 12: 171-5. February 19, 1909.

Government Ownership of Railroads.

How can the highway character of railroads possibly be denied? It was recognized by the legislatures when they authorized condemnations under the right of eminent domain; and it was recognized by the courts when, upon the basis of the right of eminent domain, they sustained condemnation proceedings for railways. Now the right of eminent domain is not a railroad right. Some railroad men think it is, but it isn't. It is a right of sovereignty—a right of the people as a whole. But if that is so, on what ground could it have been invoked in favor of railways except the ground that railways are highways?

The highway character of railroads would be quite obvious, were it not for one railroad peculiarity. With railroads, the highway and the operation are a unified mechanism—road, fixtures, and rolling stock, all one mechanically.

But that peculiarity doesn't abrogate the highway principle. If we must unify the ownership because the mechanism is unitary, it is easy to determine the direction on principle in which ownership of the whole should go. All we have to do is to ask ourselves which is the "real thing" and which is its incident. The incident always goes with the "real thing" and not the "real thing" with the incident—the tail with the dog and not the dog with the tail.

And which is the "real thing" in railroading? Is it the rolling stock and fixtures, or is it the highway right? Can there be any serious question? Upon principle it must be conceded that fixtures and rolling stock are appurtenant to highway, and not highway to fixtures and rolling stock,—when all happen to be mechanically one.

If, then, unification of ownership is unavoidable, principle demands that ownership of the highway mechanism shall go with the highway right.

This conclusion brings forward the determining question again. In whom should ownership of highway rights be reposed? Should this ownership be private or public—individual or governmental?

Governmental, of course. We all see it, we all acknowledge it, when habit helps us. We are in doubt only when the principle in a familiar application is appealed to in support of a similar but unfamiliar application.

But there is no room for doubt if we consider that *private* business is not the only kind of business. There is also such a thing as *government* business. Boot-blackening is an example of private business; levying taxes, or preserving the peace, are examples of government business.

To generalize, we should say that a private business is one which anybody may go into unless government conditions it arbitrarily. Any person may go into storekeeping, manufacturing, transportation on open highways, fishing in open waters, and so on. He needs no government franchise unless government has interposed barriers under its police power. That is to say,—and this is the point,—he needs no government franchise on account of the nature or essential character of the business. In the nature of the occupation itself his own will determines his action, and his customers determine the rest.

But government business is fundamentally different. Its essential character is such that nobody can engage in it as a private occupation without a government franchise. For example, nobody can engage in levying taxes unless he has a government franchise to do so. This is obviously true

also of preserving the peace and administering justice. Isn't it equally true of opening and maintaining highways? No-where can any person engage in the highway business without a franchise from government. And it makes no difference in this respect whether the highway is paved with dirt, concrete, brick, stone, or parallel rails.

Now, our contention is that any business the essential character of which is such as to make a government franchise an absolute prerequisite to engaging in it, is primarily a government business. Consequently when private interests have a franchise to engage in such a business, the business is "farmed out," precisely as a tax collection used to be.

The question of government ownership of rail highways is really not a question of taking over private business; it is a question of resuming a "farmed out" government business. To maintain the present system of railroad ownership, is to maintain a system of "farming out" of government functions to private exploitation. It is making public highways private property.

False in principle, that policy cannot operate in practice to the common good. It tends to foster bad business and bad government as surely as plague germs tend to produce deadly epidemics.

Current Literature. 51: 512-5. November, 1911.

Uncle Sam as a Railroad Magnate.

The average American thinks little of Uncle Sam as a business man. We prefer as a rule to believe in the efficiency of private enterprise; yet down in Panama Uncle Sam has shown remarkable ability as a railroad magnate. The United States, in building the Panama Canal, is not only operating two railroads, but is running in connection with these a steamship line, two hotels, a department store and a food supply business. This first large test of direct government activity in industry and commerce seems partic-

ularly timely in view of the suggestions that the government solve the Alaskan tangle by building and operating a railroad of its own. Our experiences in Panama, remarks Mr. Albert Edwards in *Success* are demonstrating that the spirit of American enterprize is bigger than "individual initiative"—that epoch-making things can be accomplished, even when individual activity fails. "The facts of the case force us to revize our old judgment. Collective Activity—this new force which we are developing with such amazing success in the tropics, which we Americans have carried further than any other nation—is worth considering as the means of solving our problems at home."

The Panama Canal is a government job. It is dug by government employees, bossed by government engineers. Not one employee, from Colonel Goethals down to the Barbadian negro boys who carry water, hopes for private profit in this—the most colossal enterprise of the twentieth century. The first heterodox fact which impresses itself upon the visitor from home, remarks Mr. Edwards, is the sight of the high power locomotive with "U. S." stencilled on the cab.

"There are two railroads in the Canal Zone owned and operated by the government: the Isthmian Canal Commission system, used exclusively for construction purposes, and the Panama Railroad, which, beside helping in the Canal work, does a large and profitable commercial business. Compared with other tropical railroads the P. R. R. is a model of efficiency and economy in every department. There is no system at home so thoroly equipped with safety appliances. The accident rate both for employees and passengers sets a standard which none of our privately owned roads have ever approached. The two systems together operate about 3000 miles of track in the Zone, and carry more traffic per mile than any railroad in the states except a few terminal systems like that of the Chicago stock-yards.

"The annual report to the stockholders of the Panama Railroad Co.—it is technically a private corporation so that it can conduct a commercial business—for the year ending June 30, 1910, shows a gross earning of \$6,100,788.83. Extensive relocation work is in progress, but the operating expenses were only \$4,358,426.92. The company also operates a direct line of steamers between Colon and New York. They make the run between these ports in a day less than the competing lines and in the year ending June 30, 1910, they earned over \$150,000 net."

The people in authority, Mr. Edwards goes on to say, have told us that a public-owned railroad would surely fail; it would be eaten up by corruption administered on the

"spoils system," and become the headquarters for general inefficiency. Our experiment in Panama seems to prove the fallacy of this argument.

Arena. 41: 160-70. February, 1909.

Railway Nationalization Not Confiscatory. Carl S. Vrooman.

Contrary to the prevailing opinion, the nationalization of our railroads would work no hardship to owners of railroad stocks and bonds. All talk about confiscation of railroad properties, whether it be indulged in by anarchistic fanatics, or by frenzied financiers, is both hysterical and absurd. So far as I have been able to discover, there never has been a case on record in any part of the world where a government on purchasing a railroad from private individuals or from a corporation has paid less for it than it was worth. On the contrary, a number of instances are on record where the governments have given not only more than the roads purchased were worth, but more than they legally were required to give.

The United States government, when it undertakes to nationalize its railroads, will find itself confronted with some special problems which European countries have not had to face. In our railroad charters, unfortunately, there have been incorporated no clauses providing for the possibility of a future governmental purchase of the roads. As a result of this oversight, we shall be forced to have recourse to one of three methods—either purchase by means of friendly negotiations, or purchase by the exercise of the right of "eminent domain"—or both. In the case of our recent acquisition of the Panama railroad, the purchase finally was made by means of a regular business bargain. But before that bargain was consummated, the government, in order to force recalcitrant stockholders to sell for a fair price, found it necessary to introduce a bill into Congress which passed the Senate unanimously, and was favorably

reported by the Interstate Commerce Committee of the House, providing for the condemnation and purchase of the road in accordance with the right of "eminent domain." As the stockholders of the road at this point decided to accept the government's offer for their stock, further action was unnecessary, and the bill was never brought up for final passage in the House.

This miniature purchase by our government has had a very salutary effect. It has cleared our national atmosphere of a number of fallacious arguments against the possible future nationalization of our railroads. First of all, it has established the constitutional right of our government not only to own but to buy railroads. Secondly, it has shown the possibility, and even the advisability, under certain circumstances, of the utilization by our government of its right of "eminent domain"; and thirdly, it is demonstrating at the present time, by the marked improvement which is taking place in the quality and quantity of the railroad service offered, by the important reductions that are being made in rates, and by the greater initiative shown in every phase of the management of the road, that our government is capable of effective and satisfactory railroad administration.

North American. 180: 576-85. April, 1905.

Common Sense of the Railroad Question.

Francis G. Newlands.

Unless the railroad system is unified and simplified, the complexity of the situation will drive the country to government ownership as a solution of the difficulty. The argument in favor of it is simple. It is urged that the Post-office Department is already engaged in transportation which is conducted to the entire satisfaction of the people; that its work now involves expenditures equal to about one-seventh of the operating expenses of all the railroads; that an en-

largement of its operations could be secured by organizing a Division of Transportation in this Department; putting at its head a capable man, trained and experienced in rail-roading; authorizing suit for condemnation against all railroads, the government entering into immediate possession and retaining the present force of employees and officials, eliminating such of the latter as may be unnecessary under unified conditions; the condemnation to cover simply the interest of the stockholders, the market value of which is now about \$4,000,000,000, leaving existing bonds aggregating about \$6,000,000,000 as a lien upon the property, to be retired as they mature with government bonds at $2\frac{1}{2}$ per cent., the stock to be paid for by a present issue of government bonds at the same rate.

The railroads are now capitalized at about \$12,000,000,000, one-half in bonds and one-half in stocks. The market value of the total issue is now about \$10,000,000,000. The gross revenue of all the railroads for the past year was about \$1,950,000,000, an increase over the preceding year of about \$175,000,000. The operating expenses now aggregate about \$1,260,000,000, leaving about \$690,000,000 as the net income. It is urged that, under government ownership, the government would have to pay out of this net income the present interest on existing bonds, amounting to about \$270,000,000, and $2\frac{1}{2}$ per cent. on the \$4,000,000,000 of the government bonds, issued in lieu of existing stock, about \$100,000,000, or \$370,000,000, in all, leaving \$320,000,000 for betterments, extensions and a sinking-fund for the redemption of the bonds. This latter sum can be increased by the gradual reduction of the interest on the railroad bonds from an average of $4\frac{1}{2}$ per cent. to $2\frac{1}{2}$ per cent., a saving of \$120,000,000 annually. It is contended that a sinking-fund could thus be provided which would extinguish the entire debt in less than fifty years, and leave the operating expense alone as a charge upon the commerce of the country.

Contemporary Review. 87: 174-92. February, 1905.

Railways of Germany. O. Eltzbacher.

Immediately after 1879, Prussia rapidly bought up all the more important lines, and within a few years the state more than trebled its railway property, as is apparent from the ensuing table:—

MILEAGE OF RAILWAYS OF PRUSSIA.

	State Railways Kilometres	Private Railways Kilometres	Total
1879	6,323.6	13,650.1	19,973.7
1880	11,455.3	8,893.1	20,348.4
1881	11,584.6	9,159.2	20,743.8
1882	14,825.6	6,329.8	21,155.4
1883	15,301.1	6,604.2	21,905.3
1884	19,766.9	3,002.6	22,769.5
1885	21,138.4	2,496.6	23,635.0

From the foregoing figures we see that the state turned in five years from a small railway manager and owner to a railway monopolist. As a rule the state as a monopolist is unprogressive and unenterprising, *vide* our own Post Office. But the Prussian government did not go to sleep once it had acquired the railways. On the contrary it extended them most energetically, as the following figures prove:—

MILEAGE OF PRUSSIAN STATE RAILWAYS.

	Kilometres
1886—87	21,746.1
1891—92	25,206.3
1896—97	27,691.1
1902	31,341.8

If we now compare the growth of all the German railways since 1886, when the state possessed practically the railway monopoly, with the growth of British railways during the same time, we arrive at the following remarkable results:—

GERMAN RAILWAYS. BRITISH RAILWAYS.

	Kilometres		Miles
1880.....	33,411		17,933
1902.....	51,964		22,152
	Increase + 18,553		Increase + 4,219
	" + 55.5%		" + 23.6%

These figures show that the German railways have, under state ownership, grown more than twice more quickly than have those of Great Britain under private ownership. It might, of course, be objected that in densely-populated Great Britain there was no more room for the extension of railways. But that argument should be used with caution, for we find that Germany has now about six thousand miles more railways than has Great Britain, and, according to the German statistics, there are now 9.5 kilometres of railway per ten thousand inhabitants in Germany, whilst there are only 8.6 kilometres of railway per ten thousand inhabitants in this country. Measured in proportion to the population, the railway net of Germany is now 10 per cent. denser than that of Great Britain.

The activity and progressiveness of a railway system is apparent not only in its length and extension, but also in its equipment. The magnificent palatial railway stations of Germany, which form such a strange contrast with the mean, dirty and cramped railway stations of this country are well known. But it is not so well known how rapidly the rolling-stock on these lines has increased since the year when almost the whole of them were brought into the possession of the state. Therefore, the following figures may be of interest:—

	Locomo- tives	Passenger Cars	Freight and Luggage Cars
1879	7,152	10,828	148,491
1884—5	8,367	13,063	174,157
1889—90	9,425	15,177	194,705
1894—5	10,991	18,391	231,266
1900—1	13,267	24,225	303,364

During the twenty years following the creation of the state railways, the rolling-stock of the country has been more than doubled. Improved material has been introduced everywhere, travelling has become infinitely more comfortable and more rapid on the state railways than it ever was on the old private lines, and owing to the introduction of more powerful engines, larger freight cars, etc., haulage has become far more economical and efficient. Goods-trains, in Germany, convey, as a rule, more than twice the weight which they carry in this country, but an exact comparison cannot be made, because our railways do not publish ton-mile statistics which would glaringly show up their inefficiency. Whilst the most common truck in Great Britain holds about 8 tons, that mostly used in Germany carries 15 tons. Therefore, the German goods-trains haul a smaller dead-weight, and are consequently much more economical than are English toy trains pulled by toy engines, and composed of insufficiently loaded toy trucks.

How marvellously the freight and passenger business on the German railways has expanded since they came into the possession of the state may be seen from the following statistics, which show that, whilst the mileage of the railways has grown within twenty years by one quarter, and whilst the rolling-stock has been doubled, passenger and freight traffics have more than trebled.

	Passenger Kilometres	Ton Kilometres
1879	3,797,172,000	8,644,625,000
1884—5	5,083,700,000	12,414,712,000
1889—90	6,903,526,000	16,142,648,000
1894—5	8,763,723,000	18,162,727,000
1900	14,310,204,000	27,434,536,000

Although the wages of the German railway servants have considerably risen all round, and although, at the same time, freight and passenger charges have been lowered all round, as will be seen in the course of this article, the financial result of the state railways has become more satisfactory from year to year, largely owing to good management. The

following have been the profits earned on the total capital of all the railways of Prussia:—

PRIVATE RAILWAY AVERAGE.

1869	.....	6.5 per cent.
1874	.....	4.4 per cent.
1879	.....	4.9 per cent.

STATE RAILWAY AVERAGE.

1884—5	.....	4.9 per cent.
1889—90	.....	6.2 per cent.
1894—5	.....	5.6 per cent.
1900	.....	7. per cent.

Whilst under private management the railway profits were stagnant, or, rather, retrogressive, but they became rapidly progressive after the railways had, in 1879, been taken over by the state. A profit of 7 per cent. on the whole railway capital is a result of which an English railway director might, perhaps, dream, but would not think, for the net receipts of all the British railways have fluctuated for so many years between 3 and 4 per cent. that 4 per cent. appears now an ideally high return on the total British railway capital. As Prussia borrowed the money with which she bought the railways by means of loans, which return about $3\frac{1}{2}$ per cent., the state makes every year on its railways an immense profit, which flows into its exchequer. Prussia has a state debt of £351,335,500, and the net earnings of the state railways for 1903 not only sufficed for making the necessary provision for the interest on the whole of the National Debt and for its redemption, but left over and above that sum a clear balance to the state of £10,195,500, which went to the relief of taxation.

The railway-using public, all the world over, desires, chiefly, that the conveyance of passengers and goods should be quick, convenient, punctual, equitable and cheap. These five requirements are well fulfilled by the German state rail-

ways. Although a few show trains on British lines are still faster than are the show trains on German lines, the average speed of passenger trains is, according to a high German authority, considerably greater in Germany than it is in Great Britain. The German lines are no doubt more convenient than our own lines, owing to the unity and uniformity of their traffic arrangements, trains, time-tables, etc. Tickets issued from one town to another are, as a rule, available on the different lines connecting the two towns, and if a traveller should choose a roundabout way, he will not be told, "Your ticket is not available on this line," for the German railways are, for all practical purposes, one line. In Great Britain it requires years of travel and of careful observation to learn one's way across the country and its numerous lines, and to avoid the many pitfalls which are everywhere placed in the way of the inexperienced traveller. In Germany, such pitfalls do not exist, and the greatest simpleton will travel as cheaply, as comfortably, and as rapidly all over the country as will the most cunning commercial traveller. On many British lines, and especially on those South of London, trains appear to be late on principle. In Germany, railway trains arrive, nineteen times out of twenty, to the minute, because the government punishes severely those who are responsible for delay.

The German state railways have largely contributed to the prosperity of the German industries; the British railways have largely contributed to the decay of the British industries. In Germany, trade policy is made by the trade; in Great Britain it is made by the railways, which, without consulting the trade, prescribe its course, stimulating it here, and stifling it there. But the greatest injustice under which the British producer suffers is that the British railways are allowed to convey foreign produce more cheaply than they carry British produce, whereby they directly subsidise the foreigner to the harm of the native producer. They purposely support foreign industries on the broad principle, "On British produce we charge what we can, on foreign produce what we may; British produce has to come to us,

foreign produce has to be attracted." Unfortunately, redress for those who are injured by this nefarious policy is very difficult, very costly and almost impossible, in view of the secrecy of railway charges. In Germany such outrageous conduct would be impossible, even on the part of the few private railways still existing.

Whilst in this country the railways raise fares and freights at every opportunity, the fares and freight charges of the German state railways are steadily going down, as the following figures show:—

RECEIPTS OF THE GERMAN RAILWAYS, PER TON
PER KILOMETRE.

	Goods by fast train	Goods by ordi- nary train
1893	24.47 pfennigs	3.79 pfennigs.
1896	24.09 pfennigs	3.79 pfennigs.
1899	21.75 pfennigs	3.57 pfennigs.
1902	17.01 pfennigs	3.52 pfennigs.

If we now look into the earnings of the German railways on their passenger traffic, we find the following figures, which also show a decrease of charges:—

RECEIPTS OF THE GERMAN RAILWAYS, PER PAS-
SENGER PER KILOMETRE.

	1st class	2d class	3d class	4th class
1893.....	7.87 pfennigs. ...	4.96 pf. ...	2.94 pf. ...	1.99 pf.
1896.....	7.94 pfennigs. ...	4.71 pf. ...	2.76 pf. ...	1.98 pf.
1899.....	7.75 pfennigs. ...	4.66 pf. ...	2.69 pf. ...	1.96 pf.
1902.....	7.33 pfennigs. ...	4.48 pf. ...	2.67 pf. ...	1.89 pf.

In Great Britain the maximum charge for third-class travelling is 1d. per mile, and a glance at any railway guide, such as the A B C Guide, will show that the British railways charge, in nine cases out of ten, the full maximum rate. In Germany the lowest class is the fourth class, where the average charge is little more than $\frac{1}{3}$ d. per mile, whilst the charge for third class is about $\frac{1}{2}$ d. per mile. It

is also worth noting that in Germany travelling first class is comparatively very much dearer than it is in England. On an average it costs in that country about three times more to travel first class than third class, and about four times more than it costs to travel fourth class. But in Great Britain travelling first class usually is only about twice dearer than it is to travel third class. In Germany the poor man travels cheaply, whilst in England the rich man travels cheaply.

The German states pursue a truly national railway policy. Railways are built where they are wanted by the population or by the state even if they do not pay, for the German state considers itself as the servant of the nation and as the trustee of its interests, and not the nation as the milch-cow of the railway department. Hence, the German states have encouraged the building of canals in every way, and the tolls charged for their use are so low that the government loses about a million sterling per annum on its canals. Again, the German government has in no way interfered with the building of electric trams, whilst the railways in the classical country of freedom and non-interference have nefariously closed the canals and obstructed the building of electric tramways, in order to deprive trade which wished to escape strangulation of an alternative outlet.

Annals of the American Academy. 29: 310-22. March, 1907.

Prussian Railway Administration. Ernest S. Bradbld.

Financial Results

The capitalization of the Prussian-Hessian system, about \$1,952,750,000 in 1899, amounted in 1905 to \$2,225,000,000, about \$105,800 per mile. The average net profits amounted in 1903-4 to 7.12 per cent and in 1904-5 to 7.17 per cent of the capitalization. The excess of earnings over disbursements, which has amounted each year since 1894 to \$100,000,000 or

more, is applied, first, to pay the interest on the railway debt; then, except that a small sum (\$500,000) may be used to meet any deficit in the ordinary state budget, the next claim is three-quarters of one per cent of the total railway debt (not the unextinguished portion) for a sinking fund; then, any balance may be invested in new lines or be paid to the government for general expenses. From 1881 to 1899 \$350,000,000 was so turned over to the government. For the year 1904-5 the net profits amounted to \$158,190,000.

General Conclusion

"The results of the nationalization of the railroads in Prussia have been highly satisfactory," says Prof. Emory R. Johnson, "particularly in its financial results." Its success has been due in no small part to the well articulated, flexible and elastic system of administration. A definite head, well defined control and responsibility all the way down from minister to depotmaster, with shippers in close touch with the railway management, result in rates which change with the changing needs of commerce, and in a service adequate for Germany. Preferential rates whenever granted are granted openly, after full and public discussion; there are no secret rebates. Prussia has satisfactorily solved the problem of government ownership. Would the United States be as successful?

Quarterly Journal of Economics. 26: 341-62. February, 1912.

First Decade of the Swiss Federal Railways.

A. N. Holcombe.

Probably the fairest procedure for determining the measure of success obtained by the Swiss government in the railway business is to ascertain first what it aimed to accomplish. The arguments advanced by the Federal Council in advocacy of public ownership were as follows:

1. The desirability of consolidating the independent railway lines of Switzerland in order (a) to save the expenses of the superfluous company and general managers' offices, (b) to secure the advantages of monopoly and organization on a larger scale in equipment and maintenance of way, and in operation and the security of traffic, and (c) to improve the local service by the more generous employment of the profits on the profitable portions of the business for the extension of the service into less profitable places.

2. The reduction of fixed charges by the substitution of the credit of the government for that of the private companies.

3. The application of net profits to the amortization of capital until the entire railway system should be owned clear of debt, thus eventually making possible a great reduction of rates (France, Germany, and Austria, it was believed, would be in a similar position by the middle of the twentieth century).

4. The abolition of discrimination of all kinds, and the establishment of uniform and just rates (the message intimated that the lowest rate for each class of traffic then in force on any private road would be extended to all the roads to be acquired by the federal government).

5. The more effective representation of the interests of shippers and of the travelling public as opposed to the interests of stockholders in railway management.

6. The improvement of the conditions of employment of the employees (a) by standardizing the various wage scales and labor regulations (the Federal Council intimated that the highest wage scales in force on any of the roads to be acquired would be extended to all of the roads to be acquired), (b) by better enforcement of federal labor legislation than was possible while the lines were under private management, and (c) by maintaining superannuation and other benefit funds on a sound and liberal basis.

7. The elimination of foreign influence from the management of Swiss railways (apparently in at least three of the leading roads foreign stockholders then held a controlling

interest, and such control, in the opinion of the Federal Council, was politically dangerous.

The message of the Federal Council was tinged with a strain of sentiment. There was some appeal to the national pride, which ought to insist upon the popular management of those affairs which are of prime importance to the safety and well-being of the commonwealth, and to the national prejudice, which ought not to tolerate the threatened control of Swiss domestic commerce by aliens. But in the main the Federal Council founded its case upon sober calculations of lower rates and additional facilities for shippers and travelling public, of improved conditions for railway employees, and, of better management generally. The arguments of the Federal Council were tersely summed up by a sympathetic American writer. "The nationalization of the Swiss railroads", he writes, "was inevitable, a natural fruit of the spirit of democracy"; but the "direct efficient cause was business opportunism."

Let us now consider the results of this policy of "business opportunism". In the first place, the political dangers of the alien control of Swiss domestic transportation, whatever they may have been, were definitely removed. So much nationalization accomplished. Much of the purchase money, to be sure, was borrowed abroad on the credit of the government, but foreign bondholders and foreign stockholders are not of the same genus. The Swiss people by the nationalization of their railways not only assumed the responsibility but obtained the power to manage them in the interests of Swiss shippers, travellers and railway workers. After nationalization, there could be no danger of the exploitation of the Swiss people as a whole. The only possible danger would be that of the exploitation of one class of the people by another. The general public in its political capacity might exploit the railway workers by denying them just compensation and conditions of employment; conversely, the railway workers, by gaining an improper influence over the government of the day, might exploit the general public by obtaining excessive wages at the cost of reasonable rates

of transportation. In fact the relations between the state employer and the railway workers have been singularly harmonious and free from friction. The workers have never struck, nor even threatened to strike. The government, on the other hand, has always maintained its authority, and, while treating its employees with liberality, has never given them more than could be publicly shown to be their due.

The conditions of employment on the federal railways were regulated by the laws of June 29, 1900, and December 19, 1902. The various grades of employees were classified, and maximum and minimum rates of pay were prescribed for each class. The highest rates paid on any of the private roads were adopted as the minimum rates for the corresponding classes of the federal service. The new rates went into effect May 1, 1903, and each third year thereafter the pay of every employee who had served through the preceding three years was to be increased by three hundred francs until the maximum for the class should be reached. An eleven-hour day was established (which is less than the usual Continental European working-day), with the further provision that every train-crew should have at least ten hours of unbroken rest in each twenty-four, and all other employees at least nine hours. More liberal provision than had previously been the rule was made for a weekly day of rest and for annual vacations. The common laborers shared in the improved conditions of employment, but the most highly paid administrative officers suffered, since in view of the salaries paid to other officers in the service of the federal government, it was not possible to continue the fancy salaries sometimes paid by the private companies to favored officials. These changes, the improved conditions of employment even more than the higher wages, tended to increase the operating expenses of the federal railways; but they had been practically promised in advance, and their probable cost had been reckoned with by the advocates of nationalization.

The labor policy of the Swiss railway management is revealed by the conduct of the employees when the pressure

of the recent increase in the cost of living began to be felt. The standard wage scale was established upon the basis of the general level of prices and wages in 1899. Since then the rise in the general level of prices has been world-wide. According to Calwer's index number, which most adequately portrays the monetary situation in Switzerland, the rise in the cost of living from 1899 to 1907 amounted to 17½ per cent. The highest rate of wages in effect upon the private railways (which were the basis of the governmental rates) had been established in 1896 and the rise in the cost of living since then amounted to over 27 per cent. The men began to complain, respectfully, but during 1906 with increasing vigor. The government, when confronted by the men with family budgets and other pertinent evidence of the fall in real wages, recognized the justice of their claims, but wished to postpone the revision of their wages until a general act could be prepared that would apply to all federal employees. In December, 1906, the Union of Postal, Telegraph, and Customs Officials, the Union of Swiss Transportation Laborers, and the Union of Swiss Transportation Officials simultaneously petitioned the Federal Assembly for a special supplement to their regular wage during the year sufficient to compensate them for the increase in the cost of living. The Federal Council ultimately recommended that each married employee and each unmarried employee with persons dependent upon him for support, earning less than 4000 francs a year, should receive a supplement to his annual earnings of 100 francs; and that all other employees earning less than 4000 francs should receive 50 francs. The Federal Council took pains in its message to the Assembly to remark on the courteous tone of the employees' petitions and the reasonableness of their request. The payment of this "high-prices increment" was repeated in 1907 and 1908. In 1909 the scope of the extra payment was extended, and finally a law of June 23, 1910, revised the classification of railway employees and established a general and permanent increase of wages.

This incident in itself is not perhaps of great importance,

but it illustrates the good understanding that prevails between the railway management and its employees. The influence which the latter exert in order to bring about an improvement of their conditions of employment has no unhealthy effect upon Swiss politics. It is not so strong as to subordinate the good of the service to their private advantage, and yet strong enough to secure the prompt recognition of their just claims. Nor has governmental management brought with it an extravagant overmanning of the roads. The rate of increase in the number of employees on the federal railways up to the end of 1908 was less than the increase during the same period on the St. Gothard, which remained under private management until the following year, although the rate of development of traffic was greater on the federal lines than on the St. Gothard. The total number of employees at the end of 1909 was 34,575, and there is absolutely no evidence of "politics" in the management. Suitable provision is made for insurance against sickness and accident, pensions are provided in the event of chronic infirmity or old age, and the organization of labor is provided by the management itself. Thus public ownership has brought with it the adoption of methods that recognize the mutuality and solidarity of labor, and convert the craving for combination and mutual support, so characteristic of modern wage-earners, into a productive asset.

As soon as the government had gained control of a sufficient number of lines, it proceeded to fulfill its pledges with regard to rates. . . . The law provided an elastic process of rate making for service in the future. Increases or cancellations of rates require three months' advance notice, but the period may be shortened, if material reductions accompany increases of rates, or if international through rates are increased on the external portion of the route only. Reductions of passenger rates must remain in effect at least three months, and of freight rates at least one year, but reductions may be granted for shorter periods if the period is stipulated in advance. These restrictions do not apply to excursion rates. Thus the public enjoys complete security

against unfair discrimination (for there never have been any charges of secret rebating or criminal collusion between railway officials and favored shippers), without unduly restricting the power of the federal railways to adapt their charges to special conditions.

The law of July 27, 1901, not only established a satisfactory system of rate making, but also provided for the redemption of the pledges for improved service. The number and speed of trains and the supply of rolling-stock has been increased, terminal facilities have been improved, and ways more solidly maintained. The reports of the chambers of commerce of Swiss cities and of other bodies authorized to speak in the name of the economic interest of the country are full enough of specific criticisms of the service and suggestions for its improvement, but there is no disposition to disparage the capacity of the railway administration or to condemn its conduct of affairs.

There has been a wide spread impression in recent years, both in Switzerland and elsewhere, that the federal railways have proved a financial failure. This impression is founded largely upon the annual official budgets. Each year since the revised rates of wages and passenger and freight tariffs were put into effect, the railway management itself has estimated that the next year would close with a deficit. Thus in a sense it is true that the federal railways year after year have been having to face deficits. These deficits, however, have been more apparent than real. The actual financial results have regularly been more favorable than the budgetary estimates with the single exception of the year 1909, and the federal railways have regularly earned a surplus over and above the amount required for the interest and amortization charges except in the two years 1908 and 1909. This is indicated by the following table, computed from the official reports, showing in parallel columns the estimated deficits and the actual results.

OF RAILROADS

III

Year	Profit (+) or loss (-) as estimated in budget	Profit (+) or loss (-) actually resulting
1902	.....	+ 4,442,420
1903	.....	+ 1,030,682
1904	- 1,209,725	+ 60,735
1905	- 2,088,400	+ 651,734
1906	- 4,660,350	+ 2,548,523
1907	- 2,528,527	+ 429,812
1908	- 2,498,790	- 5,823,166
1909	- 10,927,330	- 4,091,020
1910	- 9,125,000	+ 7,948,758

Some of these figures are not the same as the corresponding figures in the official budgets and reports. The official budgets do not include with the regular estimates for the year any estimate of the so-called "high-prices-increments" paid since 1906 to the railway employees. Beginning with 1907, I have included such an estimate, based on the sum actually so paid in the preceding year. The official reports often carry over surpluses or deficits into the accounts of the ensuing year, where they serve to conceal the true result of that year's operations. Thus the report for 1910 states the result of the year's operations to be a deficit of 1,535,616 francs, whereas in fact the result was to diminish the accumulated deficits of the two preceding years by the amount shown in the table, that is, the largest surplus in the history of the federal railways. Taking the results of the entire operations up to the end of the decade, the surpluses exceed the deficits. Since, however, a portion of the earlier surpluses were employed for extraordinary amortizations, the official balance sheet at the end of 1910 showed a net deficit of one and a half million francs on the eight years' operations, or a little more than one-tenth of one per cent of the present funded debt of the federal railways. The amortization charges for a single year, which are a species of profit, would wipe out this deficit several times over. Since all interest and amortization charges have regularly been paid, this nominal deficit may be dis-

regarded. Indeed it should have been wiped out by the results of the first quarter's operations in 1911. So near an approach to the ideal zero of surplus profits must be considered a sufficient disproof of the charge of financial failure.

The second decade of the Swiss federal railways begins auspiciously with an estimated surplus, the first budgetary surplus since the government's policies have been in effect. The truth is that the Swiss federal railway management is to be highly commended for its energetic and sagacious handling of a difficult situation. In any undertaking in which the margin of profit is calculated so closely as in the Swiss federal railways, abnormal conditions may temporarily produce abnormal profits or losses; but over longer periods of time these should offset one another. There is no reason why the equilibrium between income and outgo should not be permanent.

Our examination of the financial history of the Swiss federal railways leads us to certain definite conclusions. Mr. McPherson's statement that the railways have become a drain upon the tax-payers is not supported by the evidence. For Mr. Vrooman's prediction, on the other hand, that the existing railways will have paid for themselves out of profits in about sixty years, there is substantial foundation in the record of governmental management. Without venturing, however, to predict, we may observe that the Swiss federal railways have already reduced rates, improved the service, raised wages and made a profit. In short, the evidence of the first decade of the Swiss federal railways is that the policy of "business opportunism" is justifying itself.

Public. 11: 103-5. May 1, 1908.

Government Railways in Australia. Max Hirsch.

The following figures, as far as they apply to Australia, constitute part of the elaborate and carefully audited bal-

ance-sheet for 1907, published by every state-railway system in the Australian Commonwealth. I owe them, as well as the comparative figures for other countries, to the kindness of the government statist of the Commonwealth, who has been good enough to furnish them to me in advance of publication and has thus saved me the enormous labor of extracting and combining them. These then are the true facts:

Country.*	Capital Cost Per Mile, £.....	Net Return on Capital Cost, Per Cent.....	Working Expenses, Percentage of Gross Revenue Per Cent.....	Per Gross Revenue, Pence	Train Working Expenses, Pence	Mile. Net Revenue, Pence
Australian Commonwealth	9,669	4.35	57.18	86.57	49.50	37.07
Great Britain and Ireland.....	55,798	3.45	67.21	62.73	42.17	20.56
United States.....	13,735	5.01	66.77	99.00	66.10	32.9
Canada	12,994	2.87	69.52	89.50	62.25	27.25

	Mileage Open for Traffic.	Area in Square Miles.	Population.	Per Mile Open for Traffic. Killed and Injured.
Australian Commonwealth...	14,190	200.9	281	0.168
Great Britain and Ireland...	23,063	5.26	1,912	†
United States.....	217,341	13.6	387	0.438
Canada	21,353	175.4	290	0.065

	Working Expenses.	Interest Charge.	Net and Interest Revenue.	Surplus Over Working Expenses and Interest Charges.
Australian Commonwealth.	£7,968,374	£4,975,341	£5,968,288	£992,947

The foregoing figures show that the net returns from the Australian state railways is higher than those from the privately owned railway systems of the United Kingdom of Great Britain and Ireland, and of Canada, and approximates very closely to that of the railways of the United States.

If, then, the Australian system is "really bankrupt," those

*Australian Commonwealth for 1907. Great Britain and Ireland, and Canada, for 1906, except that "Killed and Injured" is for 1905. United States for 1905.

†Not available.

of Canada and of the United Kingdom are worse than bankrupt, and that of the United States is nearly so. Yet they are privately owned.

Moreover the Australian system shows the lowest percentage of working expenses and the highest revenue per train mile; it shows a smaller percentage of accidents than the United States, and, crowning glory of all, its cost of construction per mile is lower, much lower, than that of any of the privately owned systems with which it is here compared.

Arena. 38: 113-7. August, 1907.

Government-Owned Railways of New Zealand. A. A. Brown.

The opportunity was afforded me during a recent visit to the United Kingdom to note by comparison the operation of private-owned and government operated railways under the British flag. Britain with a contributing population of 45,000,000, limited to an area but little greater than that of New Zealand, under the avaricious hand of private-ownership, over-capitalization and combined pools of earnings, pays in passenger fares a very much larger tariff than is paid on the New Zealand government railways, notwithstanding the great disparity in contributing population.

A comparison of the English roadbed and speed of trains is vastly favorable to the English railway system; not to be wondered at however, when we know that the first use of rails for the purpose of reducing the traction of vehicles dates back to the year 1633, and the first use of iron rails dates back to 1801. Considerably more than a century, therefore, has been devoted to the perfection of the roadbeds of Britain and the perfecting of its rolling stock. In comparison with the latter, however, the New Zealand railways are more comfortable and decidedly more cleanly. In England as elsewhere private-ownership of railways has ever used the now exploded argument of competition to prove the efficacy of its case, the fallacy of which can best be

shown by presenting comparative rates charged for ordinary travel on the New Zealand government railways with rates for like distances on English lines between points enjoining the benefits of "keen competition" and heavy passenger traffic.

EXTRACT FROM TABLE PREPARED BY HON. SIR J. G.
WARD, MINISTER OF RAILWAYS.

	Miles	First Single s. d.	Second Single s. d.	First Return s. d.	Second Return s. d.
From London to Glasgow.....	402	58 0	33 0	110 3	62 11
New Zealand (same distance)..		37 5	20 4	74 10	40 8
London to Edinburgh.....	392	57 6	32 8	109 6	62 8
New Zealand (same distance)..		36 7	19 11	73 2	39 10
London to Carlisle.....	300	40 6	24 2	81 0	48 5
New Zealand (same distance)....		28 3	15 9	56 6	31 6
London to Liverpool.....	202	29 0	16 6	58 0	33 0
New Zealand (same distance)..		20 1	11 8	40 2	23 4
London to York.....	189	27 0	15 8	54 0	31 4
New Zealand (same distance)..		19 0	11 1	38 0	22 2

Let me put these figures in another form, perhaps more easily understood by the American reader. The New Zealander can travel 450 miles first class and 500 miles second class for the same rate that is paid by the Londoner to Carlisle, a journey of but 300 miles. Once more—the Londoner pays 33s. second class to Glasgow, a distance of 402 miles for the same fare the New Zealander can travel 716 miles. Such figures, taken as they are from the official tables of rates, thoroughly explode the theory of cheapness to the public by private-ownership of railways.

Interlinked with the New Zealand railways is the progress of the colony, the convenience, prosperity and happiness of its people, and the incalculable and unmeasureable benefits that can be bestowed by a fraternal government to the people for whom the government incorruptibly stands. Closely allied to the advancement of education we find the government railways enlisted in the work of carrying the children of parents residing in remote and unsettled districts to and from the public schools for all distances up to 60 miles free, that the benefits of education might not be denied to the children of the pioneer, and workmen are granted weekly tickets enabling them to travel one way each day

for six days every week at the very infinitesimal charge of 2d. (four cents) per trip for all distances from 3 to 10 miles, while the farmer and the orchardist have the free use of the railways up to a distance of 100 miles for the delivery to them of lime for manuring and increasing the productivity of their lands, while the charge beyond the limit of 100 miles is too low to force an argument. Can you, American farmer, ever dream of such concessions while the railways of the United States are under the control and dominion of financial harpies whose sympathy with the people and their equitable demands finds fullest expression in Vanderbilt's historic: "The public be damned!"

The state has not contented itself with making concessions in fares and freights to the users of the colony's railways, but it has from time to time shown in a practical manner that it recognizes that the laborer is worthy of his hire, and has given to railway servants of all grades tangible recognition of their services in improved classification and pay. The practical nature of the recognition is shown by the fact that the increases in pay granted to the railway staff during the past nine years have amounted on the lowest estimate to no less than £365,000. In other words, the state railways have given to the public in the form of concessions, and to the employés in increased salaries, over one million pounds.

Not only is the workman well cared for during the years of his usefulness but a superannuation scheme is provided for the benefit of those who retire from time to time through ill health or old age, and in the case of death of an employé by accident or other cause before reaching the year of his retirement, his widow receives an allowance during her widowhood of £18 (\$90) per annum, with a further payment of 5s. (\$1.25) per week in respect of each child under 14 years of age.

The value of government-ownership of railways is a subject of inexhaustible merits incorporating within a full discussion the whole economic fabric of government function; the duty of a government to the people it for the time

represents, and as the history of all state-owned lines testifies to administration clearly in the interest of every citizen alike, without favors to the strong and powerful against the weak and helpless and without secret and illegal rebates, discriminations, preferentions, and drawbacks in favor of interested monopolists, as against the individual shipper.

It means that every citizen receives equal treatment and pays exactly the same rates for equal or the same service. It is the duty of the state to employ the railways as an adjunct to the development of the colony; the settlement of the people on the land; the employment of labor for the betterment of the state; the increasing of opportunities to the producer; the creation of markets for the agriculturist; the convenience of a people at a minimum cost; the rights of a people equitably maintained. It means equality of opportunity, freedom from political corruption, integrity in management. It means the employment of a great public utility for the sole benefit of the public, entirely removed from private interests for private gain.

NEGATIVE DISCUSSION

North American. 180: 235-42. February, 1905.

Railway Rates. W. Morton Grinnell.

Since 1898, the railways have been obliged to pay from 15 per cent. to 50 per cent. more for labor, fuel and all materials which they use, while their rates for passengers as well as for freight have advanced but fractionally, and are much lower in this country than in England, France or Germany, although labor and most materials are much higher here.

In this connection it is interesting to read what Mr. Priestly, the expert English authority, has to say:

"The present prosperity of the United States of America is, in no small extent, due to the low rates charged for transportation. This prosperity has reflected itself in an increase of wages all round, which, in its turn, has increased consumption and consequently production. These high wages are not due to the necessities of life costing the laboring classes in America more than they cost the same class in England. It is only the style of living which is better. At the back of it all there is, no doubt, the Protective Tariff; but that would have availed little without the cheapening of the cost of transportation. . . .

"In India, pooling and the territorial division of traffic are permitted, and railways are not only allowed, but are encouraged to protect themselves against competition. American railways enjoy no such protection (any act which tends to restrict competition is illegal), but have been left to work out their own salvation as best they could. They have consequently been obliged to devote their efforts to reducing the cost of transportation, and the great bulk of the traffic can now be carried at rates which, a few years ago, were held to be impracticable and spelt bankruptcy. . . .

"Previous to the lowering of the rates by competition, consumption of many commodities was confined to a limited class of people, and to that class in a limited quantity. The lowering of rates not only brought these commodities within the reach of a wider class of consumers, but enabled the previous consumers to increase their consumption.

"To restore the railways to solvency, it was not possible to put up rates, even if this had been desirable with the experience before them, and the railway officials were forced to devise methods which would permit their carrying the traffic at these low rates and at the same time earn a dividend for the stockholders. The

alert American mind was not long in devising those methods, and to-day railway rates for goods traffic, judged as a whole, are lower in America than in any other country in the world. . . .

"They (American railway men) have managed to do what no other country in the world has done, and that is, carry their goods traffic profitably at extraordinarily low rates, notwithstanding the fact they pay more for their labor than any other country."

North American. 164: 327-48. March, 1897.

Railway Problem: Legislative Solution. Lloyd Bryce.

In view of the fresh attacks against trusts in the State of New York and the indication of repressive legislation against them, a study of the railroads becomes especially valuable just now. They offer the most complete object lesson in connection with legislation we possess, and a calm, unimpassioned review of their past and present condition may serve, if not to check, at least to direct governmental interference along such lines of reform as are least hazardous to all concerned. Being in no wise an authority on the subject, I desire to state that I have availed myself of the coöperation and the assistance of the best experts and statisticians in the presentation of this statement.

Liberal facilities, rapid, safe, and reasonable transportation, with equality in rates for all, are great demands of the times. In answer to these demands the Interstate Commerce Law was passed about ten years ago. It is generally conceded that we have secured cheap transportation—probably the cheapest in the world. Only a few days ago Edward Atkinson demonstrated that the improvement in our railway service enables the people to move food, fuel, fibres, and fabrics at one-third the former charge; that a charge of \$31.41 per head for this purpose had been reduced to \$10.47, thereby effecting a saving to the entire nation of a fraction under fifteen hundred million dollars in a single year. In some quarters the charge has been made that railway rates have not been reduced to keep pace with falling prices especially of agricultural products. This illusion is dispelled by official figures which show that between 1873 and the present

time the general ton-mile rate for the United States has fallen nearly sixty per cent.; that the lake and rail rate on wheat from Chicago to New York has fallen at least 75 per cent., and the all-rail rate not far short of 65 per cent. On corn the fall has been 62½ per cent., and on provisions fully 50 per cent.

Here we have good evidence of reduction of freight rates for the people of the country generally, and the agricultural interests in particular. In the following table is given the average charge for carrying one ton of freight one mile on thirteen of the important railways of the United States:

Year.	Charge per ton per mile.	Year.	Charge per ton per mile.
	Cents.		Cents.
1865	3.08	1890.....	0.77
1870	1.81	1893.....	0.76
1875	1.36	1894.....	0.74
1880	1.01	1895.....	0.72
1885	0.83	1896.....	Less than in 1895.

The above railways performed about one-third of the entire freight transportation, and we find that seven and one-fifth mills, or probably at the present moment, seven mills, will pay for as much transportation over their lines as could have been obtained thirty years ago for over three cents. Nor do these averages give an adequate idea of railway progress in cheap transportation. Much of the freight on our great trunk lines is carried at half a cent per ton mile, which means the transportation of one ton of freight two hundred miles for one dollar. Indeed, the Pennsylvania Railroad in 1895 reported that it carried 8,173,218,403 tons of freight one mile, at the rate of five and six-tenths mills per ton per mile. Is it surprising that it is generally conceded by those conversant with the subject that "nothing like it in the history and development of the human race has been known"?

A glance at the passenger barometer likewise shows a decline, though the constant demands of the American public for better and more expensive accommodation and higher

speed makes the decrease less marked. The average passenger rate has fallen from over three cents per mile in 1870 to less than two cents in 1894; in round figures, say a reduction of one-third. Relatively speaking, our passenger rates are lower when compared with those of foreign countries—much lower when density of population and the character of accommodation are considered. In England, for example, the third class, or Parliamentary trains, carry passengers for a penny a mile—that is, an English penny, or two cents American money. The cost of first-class traveling in England, with a population of 541 to the square mile will average double this, while ninety-nine per cent. of the people in the United States, population to the square mile only 21.31, travel first-class at an average cost, including the unsettled areas of the country, where population is less than three to the square mile, for two cents per mile.

It is important both to the commercial and investing world and to the people of the country, that these investments should earn a reasonable income from the actual investment. I use the term actual because the companies seek no dividends for watered stock. They are content to earn a reasonable profit on what it cost to build the roads originally, with profit and interest on subsequent betterments and improvements. It must be borne in mind, as to water in railway capitalization, that while it may have been true originally in special cases, it is not true of the railways generally, because the original cash cost of the railways does not by any means represent the final cash cost in their present condition. To prove this, it is only necessary to take the construction accounts which have been paid in cash for years past on the various railroads, and add this to the original cost. Another standpoint from which to look at this is that the great majority of the railroads in the United States have been sold under foreclosure, and have had issued upon them at each foreclosure less and less interest-bearing securities, for no other reason than that the properties had been unable to earn the interest on the former indebtedness. Nearly all of the preferred stocks, and a very large pro-

portion of the common stocks, of the railroads of the country today, have been issued in the place of securities, which theretofore were interest bearing and represented cash, and the new stocks have been accepted by the present holders solely on the ground that the old fixed charges could not be earned and paid, and that the stocks merely represented ownership which should receive returns only in case they could be earned.

The question of state ownership, as yet, is hardly discussed in the United States. Those who oppose it take the ground that government ownership will not reduce rates, but that it will deaden invention and initiative. The railway systems of this country and England are undeniably better examples of what private enterprise can do than those who favor state ownership can point to as illustrating government control. In efficiency the advocates of private enterprises have the best of the argument. In the United States the railways run a train thirteen miles annually for every man, woman, and child. In England the figure is eight, in Germany four and one-half, in Belgium three and one-half. In Australia, where public control and ownership is absolute, where the roads are operated by the same race as our own, they have not yet run trains at a speed equal to eight hours' time between New York and Boston. This affords, it seems to me, a reliable indication of the probable efficiency of state-owned railways.

Popular Science Monthly. 51: 811-9. October, 1897.

Decade in Federal Railway Regulation. H. T. Newcomb.

The conflict of interest between the several corporate units of the railway system is the primary cause of the evils attendant upon railway transportation as now conducted. This fact being clearly established, it is at once evident that that portion of the Interstate Commerce law which was intended to perpetuate competition—i. e., the fifth or anti-

pooling section—is radically antagonistic to any wise and practicable system of railway regulation. It is necessary at the outset, as a first step toward a system under which railway rates can be made equal to all, that this restraint upon the carriers should be removed—not in order to save them from the bankruptcy that is almost certain to follow the vicious methods now in vogue; not for the sake of the thousands whose small savings have been invested in railway securities in the reasonable belief that Congress would not legislate so as to destroy an investment through which private capital is made to perform a public function, but in order to relieve individuals, classes of property, and localities from the unjustly discriminating charges for railway service from which they now suffer. At the same time Congress should give some substantial finality to the findings of the board of railway experts which under the name of the Interstate Commerce Commission it has created to adjudicate between the railways and their patrons, and should strengthen the visitorial functions of that body by granting whatever amendments to the law are necessary in order to secure the production of all the legal testimony desired and by considerably widening the scope of its statistical investigations.

Reader. 11: 294-305. February, 1908.

Supervision, Not Ownership. Albert J. Beveridge.

Various discriminations in rates present a startling tangle of right and wrong. For example, the Louisville and Nashville Road charged three dollars and sixty-nine cents per ton on pig iron from Birmingham, Ala., to Cordelia, Ga.—two hundred and sixty-seven miles; while, from Birmingham to Macon—two hundred and thirty-two miles—the road charged one dollar and eighty cents a ton. Hundreds of similar discriminations existed and still exist. For instance, the railroads charged two dollars and twenty-four cents for cotton goods from New England to Denver, and yet only

one dollar per hundred from New England to San Francisco, more than fifteen hundred miles further on. The discrimination as against Spokane and in favor of the Puget Sound cities is generally known. Another illustration is the rate between New York and Atlanta, Ga., where the charge is much higher for a town on the line of the railroad a hundred miles nearer New York than it is to Atlanta. That is to say, a merchant in a town on the same line of railroad must pay higher freight for a consignment delivered to his town than the merchant at Atlanta, a hundred miles farther on the same line, must pay for a consignment delivered in Atlanta. On the face of it, all this looks outrageous. In many instances such discriminations are outrageous, as in the example first given of the Birmingham iron rates, which the interstate commerce commission corrected and required to be made equal between the points named—a thing the states could not possibly do.

Reasons for Some of These

But, upon examination, the reason for some of these discriminations becomes clear. Take, for instance, the Atlanta rate cited by Professor Meyer, as an example of the purpose of the basing point system. If the railway gave to a town one hundred miles north of Atlanta a cheaper rate than it gave Atlanta, there could be no wholesale merchants in Atlanta—by making Atlanta a central distributing point for merchandise, the railroad puts the merchants of Atlanta on an equality with the merchants of New York; and towns a hundred miles north, south, east or west of Atlanta go to that city for their wholesale purchases. Thus, instead of having an overwhelming commercial center from which the merchants in every little town would have to buy directly, we have great numbers of commercial centers from which goods are more quickly, and, in the end, more cheaply distributed.

Even in the discrimination against Denver in the case of cotton goods, which at first seems impossible of explanation, it is found that the basic reason for charging San Fran-

cisco one dollar on shipments from New England and charging Denver two dollars and a half is that the railroads can not otherwise meet the competition by water from New England to San Francisco. Again, if a railway must charge each village, town or city along its line exactly proportionate rates, not only would the wholesale and distributing trade be concentrated in already existing large centers—as actually occurs in Australia, and other countries where this system has been tried—but numerous disastrous results would plainly follow.

Take an illustration: Suppose a merchant in a town a hundred miles north of Atlanta ordered a consignment from New York. This consignment would probably not fill half or a third of a car; yet the car containing that consignment would have to be halted at this little town until the consignment could be discharged. If the car was filled with other consignments to other points, the delivery to the other points would be delayed. If the car was not thus filled, it would be empty and out of use until it could be taken to some point where it could be filled with return freight. Plainly, this would be so expensive that higher rates everywhere could alone keep a road which indulged in such business from bankruptcy. If, however, the car could be loaded full of this consignment direct to Atlanta and then broken up into smaller consignments for the merchants round-about who would therefore buy from the Atlanta wholesaler, the service could be rendered more economical, and, in the end, much cheaper.

Again, if railroads are to serve every village, town and city upon exactly proportionate rates, it is plain that railroads could not be extended into thinly populated regions, except very slowly and very painfully. There would not be enough business, and, therefore, not enough revenue to build them. We must remember that the problem of the railroad manager is to keep his cars full; otherwise his road becomes bankrupt. So he sends his full car to a distributing point where it can be returned full, instead of shipping cars partly filled to every station along the route; and then from this distributing point he does his local business.

Harper's Weekly. 49: 718-21. May 20, 1905.

Should the Government Control Private Earnings?

George F. Baer.

The magnitude of the business of railroad transportation naturally invites attack, and it is easy for thoughtless men to raise a hue and cry against railroad management.

The development of the railroads of the United States is one of the most remarkable exhibitions of business capacity the world has ever known. It would be folly to say that blunders of all kinds have not been made; but the general result is entirely satisfactory. One of the mistakes made by our critics is in ignoring past conditions. Many of the things now complained of originated under circumstances which could not then be controlled. The capital of the country was limited. It was difficult to induce its investment in railroad enterprises. The truth is that there was very little American capital free to invest in these enterprises. Fifty years ago we were compelled to depend largely upon foreign capital. Various devices had to be resorted to in order to obtain the means for building our railroads—such as issuing stock as a bonus for bonds, state aid, municipal aid, land grants, and tax concessions. In addition, inducements had to be held out to manufacturers to establish industries along the lines of railroads. Special contracts had to be made, guaranteeing them low rates on their freight. It was wisely supposed that the general development of the business which the location of these industries would create would justify the railroad companies in making these concessions. Capital to acquire car equipment could not be obtained. Then, too, the old theory of a railroad in Pennsylvania was that of a highway on which every one was permitted to transport his own cars, and pay, therefor, toll, as was done on the turnpikes and canals. Consequently, the great manufactures of the country owned their own cars. This was the origin of the *private-car methods*, which are

now complained of. As the business of the country developed, the inconvenience in transportation, arising from this private ownership of cars, became exceedingly great, and gradually the railroad companies have succeeded in doing away with them. The transportation company now supplies cars to the manufacturers and shippers along its lines. This is the universal rule, except where special cars are required. Refrigerating-cars, Pullman palace-cars, and other cars for special purposes are still largely owned by private companies. The public complains of this; but for the time being it is not easy to see how this can be changed. Time will be required to solve the problem, and it will be solved just as the use of private cars by manufacturers has been solved. The difficulty in the present solution is economic. Railroads having short lines could not profitably supply refrigerating-cars for through service. In proportion to the earnings which they would receive the capital invested would be too great. The same is true of passenger-cars. The public desires through passenger service. A Pullman car leaving New York goes on to San Francisco. Just how a road like the Central Railroad of New Jersey, with a short haul to the West, or the Reading Railroad could afford to buy cars to take place of the Pullman cars, and permit them to travel all over the United States, is still an unsolved problem. Eventually, it may be that the railroads will have sufficient capital to justify an ownership of this kind of cars; but time alone will solve these difficulties, as it has solved all difficulties in the past.

The railroad managers of the United States have been for years making an honest effort so to perfect their systems as to give the public the best and the cheapest service which economical conditions will permit. What has been accomplished in the past in reducing the rate of freight, in providing adequate facilities, and in perfecting a system of railroad transportation of great efficiency and public convenience gives assurance of what may be expected in the future. Our system is admitted by every intelligent man to be far superior to that existing in any other country.

The railroad companies are just as anxious to abolish

discriminations, rebates, and all the devices which more or less, from necessity, characterized the past, as the most ardent reformer can be, and they have not only accomplished much in this direction by their own efforts, but they have likewise aided in securing legislation to prevent these things. The average shipper always wants a concession. It is a relief to railroad management to have laws prohibiting such concessions, thereby assisting them to withstand the daily importunities of selfish men. The chairman of the Interstate Commerce Commission says that, "as a result of the Elkins act" (which was a railroad measure) "discriminations are as rare as burglaries."

I have just finished reading Mr. Pierre Leroy-Beaulieu's chapter on American railways in his book, *Les Etats-Unis Au XXe Siècle*. It is a remarkable study of the American railway system by an intelligent foreigner. Its value to an American lies chiefly in its comparison with European railroads, and especially those of France. I quote several sentences:

"We may boldly say that, without the railroads, three-quarters of the immense territory of the United States, situated too far from the sea and having insufficient communication by rivers or lakes, would be still almost deserts, and would not play in the economical life of the world a more important part than Siberia did, for instance, before being lifted from her isolation by the Trans-Siberian Railroad. . . . On the whole, the prosperity of the American system, as well as the excellent condition of its service, is undeniable. If we wish to seek for models of railway operations, it is in the direction of American liberty that we must turn, and not to sterile operation by the state."

North American. 180: 410-29. March, 1905.

Government Rate-Making Is Unnecessary and Would Be

Very Dangerous. David Willcox.

The substantive provisions of the Interstate Commerce Act are that (1) rates shall be reasonable and (2) there shall be no unjust discrimination or undue or unreasonable preference between individuals, localities or classes of traffic. No

change in these rules is now suggested. Those supporting this agitation should, therefore, show that the present act is inadequate to enforce them. But this is not the case in any respect.

1. *The existing rates are reasonable.* This is shown by the course of freight earnings throughout the country for the past thirty-three years, including 1903, the last year which has yet been officially ascertained. It should be borne in mind that these figures include local as well as interstate business, and that if the two were separated the interstate rates would be considerably less.

Average Earnings per Ton per Mile.

Year	Cents	Year	Cents	Year	Cents
1870.....	1.990	1891.....	.895	1898.....	.753
1882.....	1.240	1892.....	.898	1899.....	.724
1887.....	1.030	1893.....	.879	1900.....	.729
1888.....	1.001	1894.....	.860	1901.....	.750
1889.....	.922	1895.....	.839	1902.....	.757
1890.....	.941	1896.....	.806	1903.....	.763
		1897.....	.798		

As to the facts, these remarks of the Commission are pertinent:

"Where changes of any importance have taken place in the freight rates of any section, either for local or competitive traffic, in nearly all cases lower rates are now charged than prior to the date of the act to regulate commerce. . . . Only from an extended inquiry would it be possible to accurately estimate the total reduction affected since the passage of the act to regulate commerce, but that it has been very considerable is well known. . . . Comparing the amounts received by the railways for transportation with amounts which they would have received on the volume of traffic carried from 1889 to 1893, if the average receipts per mile for 1888 had been maintained during the subsequent five years, it appears that the public would in such case have paid for freight and passenger transportation by railroad from 1889 to 1893, inclusive, \$525,459,587 more than was actually paid for such transportation during that period."*

The foregoing figures show that the downward course of rates has continued since these remarks were made.

The slight rise in earnings per mile since 1899, upon which so much comment has been made, was due principally, not to an increase in rates, but to an increase in high-class freight from 23.19 to 24.58 per cent. of the total traffic. In any case it was not unreasonable. The average rate in 1897 was .798; in 1899, by reason of unfavorable commercial con-

*Annual Report for 1894, pp. 50, 51.

ditions, but especially of excessively low rates on bituminous coal, the average rate declined to .724; in 1903, it rose to .763—not as high as it had been six years previously, and an increase of thirty-nine thousandths of a cent, or about five per cent. This fluctuation clearly came within the expression of the Commission that “when reductions have been made on account of commercial depression, it is difficult to see why corresponding advances may not properly be made with the return of business prosperity.” (Annual Report for 1903, p. 48.)

But, aside from this, there has been no such rise in railway rates as has occurred regarding prices of commodities generally. It has already been shown that in 1904, notwithstanding this slight advance in the mileage earnings, the percentage of operating expenses to earnings was 2.57 per cent. greater than it was in 1899. The recently published Bulletin of the Department of Labor (No. 51) with reference to the general course of prices shows, too, that, taking 100 as the average for the period from 1890 to 1899, the price of all commodities in 1902 stood at 112.9 or 12.9 per cent. *above* the average of the preceding decade. Applying the same treatment to railway rates, they stood in 1902 at 90.2 or 9.8 per cent. *below* the average of the preceding decade. This proves that railway rates had greatly declined while prices in general had greatly advanced. The general result of conditions in this country is that the rates are about one-third of the average in England and France and about one-half of the average in Germany.

Very few substantial controversies have ever arisen regarding the reasonableness of rates, and the Commission has frequently stated, in substance, that there is no ground therefor. In its annual report for 1893, the Commission stated:

“To-day extortionate charges are seldom the subject of complaint” (p. 12). “We are not troubled with the question (under consideration in England) that rates . . . are too high” (p. 17). “It is significant that . . . there has been, under the operation of the interstate commerce law, a steady decrease of complaints based on charges unreasonable in themselves. The concession is quite general among shippers that, with some exceptions, rates,

as a whole, are low enough, and they often express surprise that the service can be rendered at prices charged" (pp. 218, 219). "Traffic for very many competing localities is being carried at rates which do not yield a due proportion of the necessary net revenue which carriers must have" (p. 221). "Rates to competing and distributing centres are not for the most part unreasonably high; they are frequently quite low" (Annual Report for 1897, p. 14). "Many rates in this country are undoubtedly too low" (p. 2). These facts are of general application, because "nearly every city in the country of any considerable size is both a commercial and a railroad centre; therefore a competitive point in both respects" (Annual Report for 1893, p. 39). "It is true, as often asserted, that comparatively few of our railway rates are unreasonable in and of themselves—that is without any reference to other charges made by the same carrier or to those of other carriers," but they may operate to create a preference between localities. "The cases are *exceedingly rare* in which unreasonableness has been found merely from the amount of the rate itself as laid upon the particular traffic and the distance it was carried" (Annual Report for 1898, p. 27).

Accordingly, cases in which rates have been shown to be unreasonable in themselves are practically unknown. From 1887, until the present time, the Commission has found twenty-six cases of rates unreasonable in themselves, or about one and one-half annually. Further than this, not one of these decisions was sustained by the courts, and *there has not been a single case of rates unreasonable in themselves established in the courts since the Interstate Commerce Act was passed*. The record, therefore, proves clearly that the remedies provided by the act have shown no insufficiency.

The claim is, therefore, not that any injustice has been done in respect to reasonableness of rates—there is no one asserting that he has been damaged and the Commission does not assert the existence of any such injustice. It has full authority under the present statute to compel the carriers to cease charging the present rates if they are unreasonable, but it has never taken effective action in the matter; so far as it has gone the Commission has in general sustained recent advances (9 I. C. R., 382). The claim is merely and baldly that rates generally should be fixed by the government (Annual Report for 1898, pp. 20, 24; Annual Report for 1900, p. 21).

As no injustice is shown arising from the present method, such expressions of opinion cannot be deemed to warrant the government in wresting from its owners control of the railway property of the country.

2. *The existing remedies are ample to enforce the prohibition of discriminations or preferences between individuals, localities or classes of traffic.* As already pointed out, the matter of discrimination or preference between individuals has been fully covered by the original act, as supplemented by the Elkins law. The only matter remaining is that of alleged undue discriminations or unjust or unreasonable preferences between localities or kinds of traffic.

In the words of the Supreme Court:

"It is not all discriminations or preferences that fall within the inhibition of the statute; only such as are unjust and unreasonable (145 U. S., 284). Commerce, in its largest sense, must be deemed to be one of the most important subjects of legislation, and an intention to promote and facilitate it, and not to hamper or destroy it, is naturally to be attributed to Congress; the very terms of the statute that charges must be reasonable, that discrimination must not be *unjust*, and that preference or advantage to any particular person, firm or corporation, or locality must not be *undue* or *unreasonable*, necessarily imply that strict uniformity is not to be enforced; but that all circumstances and conditions which reasonable men would regard as affecting the welfare of the carrying companies, and of the producers, shippers and consumers, should be considered by a tribunal appointed to carry into effect and enforce the provisions of the act (162 U. S., 218). The mere circumstance that there is, in a given case, a preference or an advantage, does not of itself show that such preference or advantage is undue or unreasonable within the meaning of the act" (162 U. S., 220).

Claims that preferences exist and that they are unjust or unreasonable arise from the natural desire to secure equal advantages with others. "The rate is of very little consequence to the merchant, provided it is the same to his competitors as to himself" (Annual Report for 1897, p. 18). The efforts of traffic officials to meet the views of shippers and consumers in these regards have had more to do than any other cause with the reduction of rates and their proper adjustment as between different localities.

"In view of their opportunities, and the temptations to which their traffic officers are exposed, it is perhaps not too much to say that the obligations of neutrality in this regard are usually observed, and that discriminations of this character are not often the subject of complaint" (Annual Report for 1895, p. 17). "It is worth observing that some, at least, of the most important controversies involving the rates and methods of railway carriers, are rather between competing communities or producing regions than between rival lines of railway. Railway development has extended far beyond the point at which any of the greater systems finds its interests so identified with a single community as to feel wholly indifferent to the demands and needs of all com-

peting communities. Indeed, there may be entire sincerity in the contention, on the part of the officers of a great system, that any adjustment which satisfies the rival communities which it serves cannot be seriously objectionable from its own point of view. In such degree as this contention may be sincerely advanced, the carrier becomes a relatively unimportant factor in the struggles of rival localities" (Annual Report for 1904, pp. 28, 29).

This demand for absolute equality among localities can never be entirely satisfied. If under any conceivable form of statute the Commission could accomplish this, it would still be very questionable whether that result would be altogether desirable, as it would tend to destroy the active spirit of enterprise which is necessary to commercial progress.

"It is idle to look forward to an adjustment of rates which, as applied to localities and differently circumstanced persons, will bear no heavier upon one than upon another. Such mathematical equality is manifestly unattainable through human endeavor. Not even common control of all railways through consolidated ownership or government purchase could accomplish such a task of equalization for thousands of places and millions of people. Certainly, the much-vaunted theory of uniform charges for all traffic would, under the greatly diversified conditions which now prevail throughout the country, have the opposite effect, and inflict greater discriminations than arise under the existing general practice of fixing charges which attract traffic to the various lines. *Uniform rate per mile on all traffic for any distance would arbitrarily limit commerce to sections and greatly restrict production*" (Annual Report for 1873, p. 218). "Trade is no longer limited to circumscribed areas; distance hardly ever bars the making of commercial bargains between widely separated parties, and almost every article of commerce finds the competing product of another region in any place of sale. The consequence is that the products of the farm, the forest, the mill and the mine are continually demanding from carriers rates adjusted to values in particular markets. It is this competition of product with like product, of market with market, that has induced carriers, in their eagerness to increase the volume of their traffic, to continually reduce their rates to market points. Such competition is the competition of commerce itself; the strife between competing industries which the public interest demands should be left free from fettering laws and uncontrolled by restraining combinations." (*Id.*, p. 219).

In states where railroad commissions have power over future rates, questions of alleged discriminations between localities and classes of traffic are as frequent and acute as ever. Like all commercial questions, these matters are best settled between the parties. The foregoing expressions show that the carriers, in general, use their best efforts in the premises. And the record proves that the present remedies have not been insufficient. It will shortly be shown in detail

that since the Interstate Commerce Act was passed, contested cases of all sorts have been comparatively few in number, and that, *with two exceptions, the Commission has been reversed in all of its decisions as to discriminations or preferences of any sort which have been passed upon by the courts.*

The facts, therefore, show no necessity for seizure by the government of control over railroad property in order to prevent undue discrimination or unjust or unreasonable preference.

Moreover, governmental rate-making would establish rigid methods of transacting business which would tend to arrest commercial progress. The most effective cause of reduction of rates is the effort of traffic officials to enable their respective shippers to extend their business and constantly reach further markets and consumers.

"The location of new business enterprises is frequently settled since the passage of the act to regulate commerce, as well as before, not so much by the wishes of those who control them and the advantages for economical production or trade afforded at particular places, as by the favorable transportation rates which railway managers can be induced to put in force" (Annual Report for 1894, p. 57).

This process of development can be continued only through gradual reductions of rates, and in its continuance shipper, carrier and consumer are alike interested. But this process of development will be arrested if the rates are finally subjected to the veto of a body having no substantial interest in the success of the transportation business or of the industries upon the several lines.

Every rate once fixed would be incapable of change without a proceeding before the Commission as dilatory as a lawsuit; and, as the Commission proceeded, the scope of this rigid condition of rates would constantly extend. Every practical man must realize that business is carried on successfully by negotiation and agreement of the parties, rather than by the judgment of any tribunal. "Business by lawsuit" would be a lamentable failure. There is no successful branch of business in which the general future relations of those engaged therein are regulated by third parties, whether an administrative commission or a court of justice.

✓ If, indeed, a condition of absolute equality among different localities could be established at a particular moment of time, it would be temporary only. Industry in this country is intensely progressive, and the perfect equality of one day would probably be the grossest inequality of another. The absence of elasticity in a system of government rate-making is one of its most serious faults; thus the rate-making state commissions have had to fall back on distance tariffs, on account of their inability to make those delicate adjustments which are constantly made by railway traffic officers. Such rigidity is a bar to industrial progress, and probably accounts, in large measure, for the fact that in the states which have rate-making commissions, the rates are higher under similar circumstances and conditions, than in other states which have left the contract of transportation to unrestricted negotiation between the parties.

The remedy lies in the vigorous enforcement of existing statutes, which prohibit rebates and discriminations; and resort by the Commission directly to the courts without dilatory preliminaries, so as to secure expeditious action by the only branch of the government which is qualified to administer justice and determine rights of property. This will prevent unjust discriminations and undue or unreasonable preferences. So far as concerns reasonableness of the rates, it is obvious that the present method under which the Commission has power to pass upon existing rates has been effectual. But governmental future rate-making would play havoc generally, and "business by lawsuit" would be intolerable.

Gunton's. 15: 125-33. August, 1898.

Railroads and the Government. B. W. Arnold, Jr.

For the purely American principle that whatever can be done without the government should so be done, has been substituted of late years by many of our citizens the Continental idea that whatever can be done by the government

should be done by it; and along with the other claims occasioned by this change in sentiment, the demand has been made that our government should purchase and operate the steam railways. The main reason given for such action is that the evils of our present system will be remedied, though just how is not always shown. In addition, the facts are cited that our postal service has proved exceedingly satisfactory and that the experiment of government ownership has been successfully made in certain foreign countries. A full summary of all arguments advanced in support of this scheme would be about as follows:

(1) The costly law suits between different roads would be avoided. (2) Investors in railroad stocks would no longer suffer from the dishonest speculations of railroad directors. (3) Transportation being a social function demands, especially in joint traffic, uniform methods and unified instruments, like the mail service, and the power and prestige of the state is necessary to secure them. (4) This plan of railroading has been successful in Prussia and Belgium and therefore we could safely employ it. (5) The profit in railroading would go into the United States Treasury. (6) Rates would be lowered. (7) No discrimination would be practised. (8) The waste of money occasioned by cut rate wars between competing roads would be saved.

Let us examine these claims. In the nature of the case the first two would be true, for lawsuits would not arise between roads under common ownership and the government itself would be in this instance both investor and manager. In answer to the third it may be said that while a certain analogy does exist between the railroading business and delivery of mail, the problems of conducting those two businesses are not at all the same, the transportation problem being far more complex. Where one fact could be named in the interchange of freight and passengers from one road to another, or from one state to another, that demands constant uniform methods of federal control, a dozen matters of detail arising in the handling and development of traffic can be cited that require quick, elastic, varying

methods, which can only be properly furnished as necessity arises through the good judgment of able, experienced men, doing business on the spot and thoroughly acquainted with all industrial conditions present. The number of papers and letters carried from year to year is a more or less fixed quantity and can be fairly approximated at a given time; if unexpected demands arise from any quarter the new needs are met at once by extension of old methods and by only a small outlay of either capital or labor; the employment is simply a distributive process in which the charge for delivery is not based at all on cost of service and little special effort is made to build up and enlarge the business.

Not so with railroads; they must continually seek to develop new traffic, to populate new districts and establish new towns; they must constantly increase and extend their work, having an eye to the increased production of goods as well as to their distribution. The amount of transportation is therefore quite variable, being constantly affected by the industrial conditions of every community, and of course any enlargement or contraction of railway facilities must involve large investment of money and employment of much time and labor. The mail service theory of charges would shortly bankrupt every railroad in the country. The political evils apparent in our system of mail delivery, in spite of civil service reform, would be multiplied a thousand times in our transportation system in case of government ownership. About one-twelfth of the adult male population of the United States is employed in connection with our railroads, and to have all these offices at the disposal of the political party in power, to be changed if desired with the changes in administration, is not a safe condition for the independence of individual voters or the interest of the country.

--- The fourth claim, that the United States would do well to take charge of the railroads because Prussia and Belgium have succeeded, fails to recognize any differences between their forms of government and ours, or between the railroad problems presented there and here. Prussia has about 13,000 miles of railroad, the United States has over 180,000

miles; their system has 80,000 employees, ours at present would require over 800,000; the inclination of the German mind is bureaucratic and ours is just the opposite; the area of Prussia and Belgium together is 145,840 square miles, that of the United States is 3,602,990 square miles. Their system has been constructed under the supervision of the state and there are practically no competing lines; our system has been built entirely independent of the government and competing lines are numerous. Their trade and country are fully developed and no new lines are being constructed; our business is steadily expanding in volume and roads are constantly being laid to build up new sections. Germany (and the same can be said of France) has a perfected civil service of long standing and their governments are decidedly executive and administrative in form; the United States has a crude, imperfect civil service and the government is parliamentary and legislative in form. These important differences must be taken into account before safe conclusions can be arrived at and when they are carefully considered, the fact will appear that operation of our roads by political machinery would in all probability be fraught with far more disastrous evils than are sustained at present under private management. Nor has state ownership in these countries been altogether without its faults, for since Belgium has purchased the rival lines that competed with the state lines (now owning about three-fourths of all the mileage in the state) some healthful and proper competition has been stopped. In consequence, a certain diminution of activity and some tendency toward slackness of management have occurred, and there has been a lowering of profits without corresponding lowering of rates; there has been a multiplication of unnecessary forms and offices with no actual business, and a serious manipulation of accounts to make a favorable showing for the government. Great complaint is made of the lack of accommodation, cars, etc., all of which evils arise from the connection of the railroads with the government.

Italy has tried private management of roads, mixed own-

ership, (i. e., government roads competing with roads of private citizens,) and also exclusive state ownership. Not satisfied, it afterwards appointed a Parliamentary Commission to make a most thorough investigation of the matter and report facts to enable the government to see the best policy for it to pursue with reference to its roads. The Committee reported that the Italian government ought to get rid of its roads at once and charter large private companies to manage them. They claimed (1) that state management had proved more costly than private management; (2) that political dangers were very great and (3) that the state was prone to tax industry and not to foster it.

The fifth claim is that the profit of the business will go into the United States Treasury. If the business is as economically administered as at present and a profit is made, of course it will, but strict economy is not generally a marked characteristic of work conducted by the government. If the business is run for profit will it not be on virtually the same basis as at present, and will not the same methods be employed unless charges are raised? If this profit be money that could have remained in the pockets of the people, this method of collecting money would be simply a form of taxation. It could be run for the single purpose of collecting taxes, but this surely is not desirable, because the change is advocated for the benefit of the people and not to make money out of them.

The last three claims have special reference to railroad rates, and, being closely related, can be considered together. Since cut-rate wars between different roads will not arise under government ownership, competition, which always tends to lower rates, will be removed, and charges will probably be increased. In fact, the most unfair discriminations found in railroading are made in attempting to meet the cut-throat competition of ill-placed bankrupt roads which are doing business at such low rates that running expenses are barely covered, much less net profits yielded on the fixed capital invested.

The fact that the principle of unrestricted competition

has been employed in the conduct of our transportation business accounts in large measure for the gravest evils of our present system. The freedom of each road making rate sheets at will is what renders our charges discriminating, unreasonable, and unsteady; and if government ownership is the only remedy for the evil, the sooner had the better. However, (note the fact) rates would be raised instead of lowered, for it is the profitless basis on which insolvent, ill-conceived roads are conducting their business in order to get traffic that is at present playing havoc in railroad affairs and forcing all to questionable methods in developing trade. The statement that our railroads are making exorbitant profits is not borne out by facts, and freight rates in the United States are lower than anywhere else in the world. Freight charges here average but .85 of a cent per ton per mile; in 1896 they fell to .806 cent.

Discrimination unquestionably exists at present, but it is more than possible that under government ownership we should have federal legislation on rates that would favor one section of our country at the expense of another. On the other hand, is it not true that justice both to roads and the public demands that certain discriminations be made, both between different localities and also in classification of goods? Surely charges cannot be made for coal and cattle on the same basis as for chinaware, for the former will not bear the higher rates of the latter though it may cost more to handle; nor can through freight be charged as local for a reason somewhat similar. The public ought to have the benefit of the best utilization of the natural resources of different localities, and the present condition and future development of manufacturing and commercial industries should count for something in determining transportation charges. The theory of making fair rates to all is a complex one, and no doubt the practice meets with obstacles still greater. That absolute equity has not governed rate sheets in the past history of our railways goes without saying, but this does not argue the necessity of government ownership nor show that government appointees would do more satis-

factory work than officers who at present own and operate the roads. A railroad thrives as its patrons thrive, and railroad corporations must seek the building up of the communities they serve, for it is their own interest so to do. Short sighted policies which destroy the business life of a community are recognized as hostile to the permanent interest of the roads themselves, and are not in general employed except when necessitated by an unlimited destructive competition. Of course there are localities of whose support the roads are independent, and their interests suffer.

Science, n. s. 24: 523-4. October 26, 1906.

Public Ownership and the Wage-Earners. H. T. Newcomb.

In its efforts to convert municipal, state and national governments to particular portions of its socialistic program the persistent propaganda of public ownership, whose tireless activities so visibly pervade current American politics, usually demands the support of wage-earners upon the ground that the employees of public enterprises will be more favorably treated than those of private enterprises in the same field. It is claimed that public ownership means higher wages; shorter hours of labor, and, generally, better conditions of employment.

Experience proves not only that the government is not the best employer, but that it is not even a fair employer. Nor is this all. When government engages in industry on a large scale the condition of its employees naturally and inevitably degenerates to that of slavery.

Government does not advance wages with the increased cost of living.

Democracy is an arbitrary employer. Public employees must not seek to better their condition, on penalty of discharge, according to President Roosevelt's order of January 31, 1902.

Compulsory labor in New Zealand (Parsons, *Story of*

New Zealand,' p. 179 seq.) gives no hope to labor for freedom under government employment.

The public employer has neither the knowledge of labor conditions, nor the incentive to efficiency which springs from the demand for pecuniary success. As truly as republics are ungrateful, the majority is sure to prove harsh as a task-master, and grudging in yielding compensation to its servants. Its enthusiasms are usually, not always, toward generosity, but they are changing, remittent and unreliable, while its sterner morality produces an ideal of justice that inspires the niggardly legislator while he crushes, in the ostensible interest of the taxpayer, every proposal to deal fairly and, therefore, wisely with the problems arising out of the public employment of labor. More than this; democracy, or the majority, through which it operates, is intolerant of disagreement with its principles, relentless in beating down opposition to its policies, merciless to the minority which persists in impeding the execution of its will. What could such an employer be, in dealing with labor on a large scale, save a harsh task-master? What could it naturally become save a driver of shackled slaves? Where is the clear-headed and independent wage-earner who will consciously invoke such tyranny?

North American. 191: 185-94. February, 1910.

Fair Regulation of Railroads. Samuel O. Dunn.

The argument most commonly made for governmental regulation of the financial affairs of American railroads is that they are over-capitalized and charge excessive rates to pay dividends on their watered stocks. Over \$3,000,000,000 of railroad stocks and bonds are owned by the railroads of the United States themselves. Allowing for this duplication, their average net capitalization in 1907 was less than \$58,000 per mile. The average capitalization of the railroads of Canada is almost \$56,000 per mile and of the railroads of

Mexico is almost \$58,000 per mile. The cost of the German railroads has been \$105,000 per mile. The capitalization of the railroads of France is \$134,000 per mile; of those of the United Kingdom, \$272,000 per mile. There are some roads in this country that are over-capitalized and others that are under-capitalized, but a fair valuation would probably show that as a whole the railroads of the United States are worth more than they are capitalized for. It may be said, however, that regulation is needed at least to keep the roads that are over-capitalized from charging exorbitant rates. But the over-capitalized roads cannot charge excessive rates because they have to meet the rates of the roads that are fairly capitalized. A water-logged road like the Chicago Great Western has got to make the same rates as such competitors as the Chicago and Northwestern, the Chicago, Burlington and Quincy and the Chicago, Milwaukee and St. Paul or quit business. "The capitalization of the railroads, I think, cuts no figure in this rate question," Martin A. Knapp, chairman of the Interstate Commerce Commission, once said. The true justification of public regulation of railroad finances, if there be any good reason for it, is that it is needed to insure good transportation service and to protect investors.

Gunton's. 20: 305-22. April, 1901.

Government Ownership of Quasi-Public Corporations.

Edwin R. A. Seligman.

The main reasons why government railways would be a failure in the United States have been mentioned in the other two general considerations adduced above. Take, for instance, the question of the investment of capital. In the case of the post-office, even though we spend over a hundred millions a year, there is no large capital account. It is chiefly current expense. But in the case of the railway service we have the most stupendous of all modern industries. The

amount of capital invested is gigantic. The fiscal reason would suffice to kill the scheme for government railways. Government ownership would throw the whole budget out of gear; the revenues and expenditures of our railways would be two or three times as great as all the rest of our revenues together, and the entire budget would depend upon the temporary prosperity or lack of prosperity of the railway system. We know that in bad times the revenues of the railways in this country shrink by tens and even hundreds of millions of dollars. This would so embarrass the whole revenue side of our budget as to lead to a complete revolution not only of our tax system but also of our entire budgetary methods. This point, which has commonly been overlooked, is of considerable significance.

Still more important, however, is the problem of the complexity of management. This alone would be an insuperable bar to governmental management of railways. Of all businesses, the railway business calls for the most delicate handling and must needs pay for the highest possible business ability. The great salaries of today are given to the railway presidents, salaries from \$25,000 to \$100,000 a year and deservedly so, because without consummate capacity the attempt to run a railway would be a failure. Governments could not hope to compete successfully in this respect with private individuals.

Conditions may indeed change during the next few decades, but under the present system we cannot expect a democracy to pay as high salaries to its officials as private industrial enterprises are able to do. The average man of business or professional ability will not be attracted to the government service. There are indeed honorable exceptions to the rule. Yet we all know of men who would have been glad to accept government positions when offered to them, but who have stated that they could not possibly afford to do so. It is asking a great sacrifice of a man, in these days of such immense opportunities for special ability, to give up comfort and wealth for the more ideal end of serving the public. Only the best and the noblest men do that, and

their numbers are as yet exceedingly few. It may be claimed that government can get the same talent at a somewhat cheaper rate than private corporations, but this is not true to the extent that it would be necessary to equalize the difference between public and private management. Therefore, to turn over the greatest, the most complex and the most fundamental industry of modern times to the hands of the government would, under present conditions in the United States at all events, lead to such a decrease in efficiency as soon to become well-nigh intolerable. The great advantage of individual initiative in industry is that the ability of the citizen is turned toward the reduction of the cost of production. All progress in the world consists very largely in lowering the cost of production of commodities by driving out old processes and introducing new processes. This results not alone in lower prices for the commodity, but, as our history has amply shown, in higher wages for the operative as well as in more prosperity for the employer. A prominent German who was one of the chief advocates of the assumption of railways by Prussia, and who has written admirable books on the American railway problem, has said that if he were an American he would be the most outspoken opponent of government assumption of railways in this country. The difference in political conditions must everywhere be borne in mind.

Annals of the American Academy. 29: 342-51. March, 1907.

Argument Against Government Railroads in the United States. William A. Robertson.

The people of the United States are enjoying unprecedented prosperity. The causes of the present rapid development of the country are numerous, but probably the highly developed railway transportation system has been more influential than any other force. In 1870 the railroad mileage of the United States was only 53,000; today it is 220,000, an

increase of over 300 per cent in a generation. Although no one questions the financial success of private management of railroads, there are many persons who believe that the railroads in the United States should, in the future, be owned and operated by the government. Those who are of this opinion argue that the railroads as now managed are a private monopoly, the effects of which are detrimental to the public, and that the only method of escaping the results of private monopoly is to substitute therefor the greatest government monopoly the world has ever known.

Such a program is so revolutionary that it can be justified only by an absolute demonstration of the failure of the present method of private ownership and management of railroads to meet equitably and adequately the transportation needs of the people of the United States. Furthermore, the advocates of the change must be able to prove that government operation can be made a success.

If a radical change is to be made in present railway operation, it must certainly be made only for good reasons. Are there adequate reasons? If so, one of the reasons would naturally be high rates. As far as rates are concerned, the consensus of intelligent opinion is that rates are generally lower in the United States than in any other country, and that until very recently, at least, they have tended steadily to decline. The complaint in regard to rates is not that they are too high in general, but that they are unduly high in certain localities and that they are not uniform to all shippers, i. e., that they are to some extent extortionate and to a large extent discriminatory.

How far, it may be asked, will government ownership simplify the problem of rate-making? It may, of course, be assumed that the government will be as much concerned as would any private corporation in establishing freight rates that will be reasonable and attractive to shippers generally, and at the same time remunerative and yield fair profits upon the capital invested. To one who has never considered the subject, the intricacies of rate-making will prove a painful and vexatious surprise. There are so many different

and discordant elements entering into the conditions that an exact solution is impossible. It is not our purpose to explain in detail what the rules of rate-making are or should be, but rather to emphasize the inherent and accumulated difficulties involved. As observed by the Industrial Commission, in its report to Congress, "the conditions are highly complex, and no simple and general rules can be made to govern in all instances. The very complexity of the problem emphasizes the necessity for intelligent direction."

The problem which a freight agent or traffic manager has to meet is so different from that which the public supposes, that it is hard to explain it in a few words. The picture that seems vividly portrayed upon the minds of most men is that of the general freight agent arbitrarily deciding upon whatever rate he deems sufficient to pay for the "cost of service" (the cost of actually moving a ton of freight a certain distance), together with enough to cover the company's taxes and the interest on the bonded indebtedness (which is generally assumed to be needlessly and culpably large), and to pay dividends on an artificial and imaginary capitalization. In reality, this sort of reasoning is putting the cart before the horse. The rate is really dependent upon conditions in the world of trade, the character of the commodity to be moved, the extent of competition from other carriers, either rail or water, and the possibilities of the development of a line of business or a section of country.

When the rate has once been made and the revenue earned, the next problem is the prosaic one—very familiar to every housekeeper—of adjusting expenses to income. The name of these expenses is legion: The wages of labor and the cost of fuel and innumerable supplies are elements in the cost of conducting transportation. The maintenance of the roadbed and stations, and of the terminal facilities in great cities—these are elements in the maintenance of the physical property of the road. New engines and cars and the repair of old ones make up the account called maintenance of equipment. The taxes due the state, and the interest on the bonded debt of the company, make up the

company's fixed charges; charges which must be met if the corporation is to remain solvent. Then there is still the need of setting aside funds against the depreciation of the property, the maintenance of a surplus against hard times and unlooked for expenses and emergencies; and, lastly, the raising of a net revenue for dividends, so that those who own the road may receive some return on their investment. All these varied expenses enter into the financial side of railroad management.

Very often the salvation of a road is bound up with a reduction of its cost of operations rather than in the raising of its freight rates—which latter performance is likely enough to be a sheer impossibility, and unwise, even if possible. The Lehigh Valley and the Southern Pacific roads are recent illustrations of this fact. Both of these companies found it necessary some years ago practically to reconstruct their properties, if they were to remain in the business of transportation and earn money. After periods of entire cessation of dividend paying, and by means of prodigal expenditures on improvements, they have once more taken their places in the list of properties for investment. Very often these periods of reconstruction press with crushing force on the owners of the road, the stockholders, of whom we hear so little in most of the discussions on railroad reform. Sometimes nothing else than a heavy loan will give the company the ready cash to meet importunate but just demands of shippers for increased facilities and speedier transit of freight. Sometimes there must be the heroic remedy of a receivership, a scaling down of indebtedness, and a general reorganization.

It is idle to imagine that officials or clerks in a government bureau will be able to handle such questions as we have mentioned better than the trained, experienced and well-paid officers of a railroad. Nay, it is difficult to think of their being intelligently, speedily and satisfactorily disposed of at all by any government department. Whoever has had dealings with a great government office knows the truth of these words. For reasons that are pretty well under-

stood by the American people, the government possesses an unrivaled facility for drawing to itself a vast proportion of the mediocre, the lazy and the unambitious. While every government office contains a certain modicum of faithful and efficient public servants, it is usually the irony of fate that they are in a permanent minority, are persistently underpaid, and, if they have not lost heart, are seeking an early opportunity to retire from public service altogether. In short, there is a steady tendency for the competent to resign and the incompetent to remain, coupled with an appalling official inertia that tends to stifle the slightest exhibition of individual enterprise or initiative. This fatal tendency toward petrified conservatism is one of the worst features about the conduct of public business. Nor is there much hope of any marked improvement through civil service reform. Excellent as that is, it is at best a cumbersome piece of machinery, ineffective outside of certain limits. A vast improvement on the spoils system, it has completely failed to raise the average government office to anything like the level of effectiveness easily secured in any good private business establishment. Enthusiastic reformers cheat themselves into the belief that the weight of an enlightened public sentiment—the traveling and shipping public being brought in daily contact with the railroad—would compel an improvement in the conditions we have pictured. Has the weight of public sentiment ever permanently cured the lesser diseases of the body politic? Has it brought effectiveness, economy and high character into the police, street and water departments of our great cities? How often is a state capitol built within the appropriation? Have the taxpayers of New York ever checked extravagance and corruption on the Erie Canal, or taken that formerly useful artery of travel out of “politics”?

Even assuming that the tone of the public service can be made equal to that of an ordinary business house, the question still remains why government officials will be able to solve transportation problems better than private individuals. There is no magic in wearing the livery of government, and

no private fund of knowledge is at the disposal of its officials. They have no peculiar facilities for reaching correct conclusions. The problems will not be a whit simplified by placing the carriers in the hands of a government bureau. The difficulties that now hang about the subject of freight rates are inherent and rest in the very nature of the service to be performed. Unless freight rates are to be prescribed on a blind, arbitrary and unreasonable basis, without regard to the real and ever-changing conditions of the business world, the same difficulties that now puzzle traffic managers, vex merchants, and assail railroad commissions and courts, will be present as surely and as potently under public service as under private ownership.

But to the mercantile community the transfer of ownership would be a change fraught with unending and incalculable mischief. If there is one desideratum for the shipping community and the world of trade, it is a system of freight rates that shall be flexible and adaptable to the thousand and one varying conditions of business. We have lately heard so much about "stability of rates" and "maintenance of the published tariffs"—necessary and proper as these are—that we have almost forgotten that flexibility is as essential as uniformity. It is the glory as well as the weakness of our transportation system that it is peculiarly American, truly a plant of native growth, and that it has, on the whole, adapted itself marvelously well to the development and unprecedented expansion of our country. This has resulted from a remarkable power of adjustment to local needs in a land where growth and change have been abnormally rapid. New communities have received transportation facilities at times when there has not been enough business to pay the bare cost of the salaries of engineers and conductors. Industrial plants, not only those of overgrown corporations, but new ones in sparsely settled regions, have enjoyed freight rates which have enabled them to land their goods in the first markets of the world. Witness the action of the Great Northern road, ever since its inception, towards the farmers and lumbermen of the northwest. Note the

policy of the Southern Railway toward the iron works of Alabama and the cotton mills of the Carolinas and Georgia.

If in place of a management of this kind, at once both sympathetic and self-interested, the merchants had been obliged to meet the stolidity of a government bureau, its circuitry of operation, the desire to postpone action till "after election," how different must have been their experience. Or, if they had been forced to deal with Congress, they might have seen the measure succeed in one house or before one committee, only to be indefinitely delayed in the other house or in committee of the whole, or played off against other interests in far-away sections of the country whose representatives demanded some *quid pro quo* for their support. They would then have realized the profound truth contained in the observation of a great modern historian, that the people's representatives and lawmakers have rarely accorded any great public privilege except under strong pressure.

Under present conditions, the aggrieved merchant may always appeal from the railroad company itself to government aid in some form. State and federal commissions stand ready to adjust rates—sometimes, indeed, with "a strong hand and a multitude of people"—and behind the commissioners are the courts. Everybody is ready and willing to move against a railroad corporation. But let the government once become the supreme monopolistic owner of the mightiest railroad in the world, and how feeble and helpless will be the shipper who pleads before some government department for relief in freight rates, having nothing but the merits of his case to invoke in his behalf.

Thus far I have been insistent only upon the main contention that, in the very nature of the case, there is nothing about government control or government officials that can promise any easy or satisfactory solution of the problems of transportation, and much to suggest the very reverse. But there are many other weighty considerations against government ownership and in favor of government supervision. One of these is the facility for offering secret rebates which must occur under any plan of government-managed railroads.

From the earliest times, government officers have been peculiarly open to fraud and malfeasance, and especially so in large and highly centralized governments. Witness Russia and China across the water. Glance at our own history. During the years after the civil war the government at Washington seemed fairly honeycombed with corruption. The Credit Mobilier and the whisky frauds flourished, and Congress actually found it necessary to impeach a cabinet officer for misconduct. The scandals in our municipal governments are too well known to need specific mention; and in very recent years we have seen the discovery of gross frauds in our postoffices, and a shameful waste of millions of dollars voted by the people of New York for improving the Erie Canal. There is nothing about government management that gives the smallest hope that the secret rebate would not be freely used. Indeed, the ease with which favors of this kind could be granted or denied would place in the hands of the dominant party such a power as is fearful to contemplate. And what reformation is so difficult of accomplishment as the cleansing of a great bureau or department?

There is another excellence which we Americans have thus far enjoyed with which we must part forever if the government is to run our railroads. This is the possibility of reorganizing a bankrupt and unprofitable line by scaling down its debts and charges. This process, drastic and severe as it may be upon a few individuals, has, nevertheless, proved of inestimable benefit to the country at large, and the very salvation of many of our now flourishing companies. It has enabled all parties to wipe off old scores, turn over a new leaf and start afresh; and this reduction of charges has made possible important improvements. But in Germany, where government ownership has long prevailed, much embarrassment has been felt from the inability of government to carry out such a process of reconstruction. The debts of the road once assumed by government remained as a permanent incumbrance, and have never been discharged if the earnings have been insufficient to pay the in-

terest. This is but another illustration of the necessary rigidity and want of elasticity of any system of management proceeding by constitution and statute, it is bound to observe legal rather than commercial requirements, and is dependent on the action of hundreds of lawmakers gathered from the four corners of the land.

If the government is to run the railroads, the thinking part of the community will demand that they be run at a profit, and not at a loss, and that the freight shall be lower than—not merely as low as—at present. If this mighty change is to be made, some great, striking and substantial gain must be the result, or the plan is not worth the carrying out.

While the American people have great faith in representative government within lines that have been tried, nevertheless they have seen the legislative branches of their government, state and federal, severely strained of late to transact only such necessary and usual business as has fallen to their lot. In the space of seventeen years, they have lived through the enactment of three tariff acts imposing duties on imports. The passage of these measures has afforded them an opportunity of observing how Congress deals with a complicated measure affecting many rival sections of country and hundreds of hostile interests.

The framing of a tariff bill, vast and vexatious as it is, is child's play beside the task of arranging a schedule of freight charges for the multitudinous cities and towns of a country extending over 3,600,000 square miles, and having commercial relations with every nation on the face of the globe. In the presence of such a duty, the most learned legislature that ever convened might well shudder in abject helplessness. From time to time, as certain individual states of our union have created state railroad commissions, they have often provided that the first duty of the new commission should be the preparation of a complete schedule of freight rates for all purely intra-state commerce (*i. e.*, commerce originating and terminating within the limits of the state). Insignificant as this labor is by the side of the mak-

ing of a schedule of rates for the nation, it is nevertheless a herculean task, and one that has proved beyond the powers of any set of commissioners that was ever got together to perform intelligently.

But the limits of this article forbid a consideration of the subject in all its details. I have tried to indicate some of the enormous difficulties involved in any system of government control and ownership of the machinery of transportation. But I have only touched upon them, and some I have not even mentioned, as, for example, the immense national debt that must be created in the attempt to purchase billions of dollars worth of railroad property, the vast issue of bonds thereby made necessary, the bitter opposition to even moderate bond issues that has been manifested by a great portion of our people, the jealousy of organized labor toward so vast and irresponsible an employer as the government, the entrance of the railroad workingman's vote into politics as the vote of a distinct faction of officeholders, the vice of a quadrennial change of management and administration at the national capital, and last, but by no means least, the probable change in the temper and tone of the federal government toward both the states and the people when made the repository of such great authority and power.

The true line of progress is that which has grown up naturally in the past generation, since 1870, and along which we have thus far traveled safely, if not brilliantly. It is the policy to which President Roosevelt has pledged himself, which Congress has embodied in a statute, and which more than thirty states of our union have actually tried by means of railroad commissions. It is a policy of regulation and supervision to be sharply distinguished from that of ownership, just as we have long had a government supervision, both state and federal, over banks, without participation on the part of the government in the actual business of banking. It has not, of course, secured perfect results, nor given universal satisfaction. Very few institutions in this world have, not even trial by jury, which is probably enshrined as strongly as any purely political institution can be in the

1000

hearts of the Anglo-Saxon race. In our new rate law, we have gone to the very verge of safety in the experiment of government regulation; and common prudence demands that we give the new machinery a chance to show the kind of work it can do before we attempt further alterations.

Harper's Weekly. 50: 554. April 21, 1906.

State Ownership of Railways.

The objections to the ownership and operation of railways by the government are serious. In the first place, an enormous army of civilian employees is placed at the disposal of the political party in power. That is obvious: the second, and still graver, objection is often overlooked. State railways are not accused, indeed, of rebates, or of discriminations in favor of *individuals*. They are charged, however, and justly, with gross discrimination in favor of *localities*. Professor Hugo Richard Meyer, of the University of Chicago, has lately pointed out in his book on *Government Regulation of Railway Rates*, that in Prussia, though that country has the most enlightened and the most independent bureaucratic government which the world has known, the State Railway Department ~~is~~ not allowed to make railway rates that will permit the surplus grain, timber, and beet-sugar of Eastern Germany to move by rail to the market of the mining and manufacturing regions along the Rhine, there to compete with the grain, timber, and beet-sugar produced in western, southwestern and central Germany. The failure, too, of the State Railway Department's efforts to get the iron and steel producers of the Saar districts to agree with the iron and steel producers of the Ruhr districts on what shall constitute relatively reasonable rates on iron ores moving from the Saar to the Ruhr, and on coke moving from the Ruhr to the Saar, has for upwards of two decades prevented the German iron and steel industry from exploiting freely the largest iron-ore deposits on the Continent of Europe,

those, namely, of the Saar region. Under the free play of competition, the Ruhr iron and steel industries would outstrip the Saar industries, but the State Railway Department ~~cannot~~ ^{could not} permit that free play of competition, lest it expose the government to the charge of favoring the Ruhr section. Such ~~has been~~ ^{has been} the paralysis of the Prussian railways under government-made railway rates, that the grain, timber, and beet-sugar producers of eastern Germany, as well as the iron and steel manufacturers of the Ruhr district, ~~have~~ had to resuscitate river and canal transportation. The truth is, according to Professor Meyer, that the present-day Germany, with its agriculture, its manufactures and trade, ~~rests~~ ^{rests} upon the waterways, not upon railways, which the régime of government-made railway rates ~~has~~ reduced to the subordinate position of feeders to the river and canal boats,

The same trade jealousy that prevents the Prussian State Railway Department from making rates that would permit the agricultural products and the timber of Eastern Germany to move by rail into Western Germany prevents also the cooperation of the State Railway Department of Germany, Austria-Hungary, and the Danubian principalities for the purpose of securing the free movement by rail into Western Europe of the agricultural products and the timber of Austria-Hungary and the latter's Danubian neighbors, or a correspondingly free movement to the East of the manufactures of Western Europe. In Russia may be observed the same paralysis of state railways through trade jealousies, and the same resultant recourse to transportation by river. Professor Meyer recalls that, on the opening of the Trans-Siberian railway, the landed interests of western Russia protested that they must not be exposed to competition from the wheat raised upon the cheap lands of Siberia. They succeeded in compelling the government to place prohibitive charges upon the carriage of Siberian wheat, so that it has proved impossible adequately to develop Siberia's enormous wheat resources. In Australia, under government ownership, trade jealousy has forced each colony to refuse to cooperate with its neighbors in the promotion of trade and industry.

The Colonial governments raise materially the rates on freight sent from one colony to the other. Victoria and New South Wales still maintain separate gauges, and the latter colony has refused to connect its railway lines in the southwestern part of its territory with the Victorian lines, lest trade should be diverted from Sydney to Melbourne. The result of the system followed is that the export and import trade of each Australian colony, as well as a large part of the jobbing business and manufacturing, is confined to one seaport city. The failure to adopt the American practice of port differentials and the American contrivance of "basing points" has produced this concentration of trade and industry. In a word, the experience of Germany has been repeated in Australia, as well as in Austria-Hungary and Russia. It justifies the words quoted by Professor Meyer, from the late Herr von Miquel, who was Prussian Minister of Finance from 1890 to 1900. He declared that "the system of government ownership of the railways will break down unless it shall prove possible to find refuge from the jealousies and conflicts of local and sectional interests behind the stone wall of a system of hard-and-fast railway rates which admit of no exercise of discretion." It justifies also Professor Meyer's conclusion, that no government which has undertaken to make railway rates by assuming government ownership, has been able to prescribe railway rates in such a way as to conserve and promote the public welfare, if the test of welfare be the making of two blades of grass to grow where only one blade grew before. Restraint of competition and of trade, with failure to develop the resources of soil and climate, has been everywhere the outcome of government ownership of railways. To that system, however, we seem likely to be driven, unless the Constitution and the laws shall enable us through our federal government, to exercise such regulation of railway rates as shall not be open to the serious objection here stated.

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Attitude of the State toward Railways. Ernest R. Dewsnap.

As a matter of practical politics, the problem of the desirable relationship of the state toward the railway has been settled in most countries of the world by the adoption of a policy of nationalization. In but three or four of the more prominent countries does the state take no part in railway management, and, in the case of England, one of the two great strongholds of independent railway enterprise, it is interesting to note that, in nearly all of her colonies, possessions and protectorates, the imperial or colonial governments have freely undertaken the responsibility of railway management. The record of the last few years shows very clearly that the tide of railway nationalization is strong and steady. The acquisition, by the state, of the Western Railway of France, of the West of Flanders Railway of Belgium, of the rail-lines by Austria, and the resumption of state operation by Italy, are examples in very recent years of the vigor and vitality of the movement. The forces underlying this development have been very complex. Political unity, social amelioration, industrial progress, and financial gain have all been influential motives, varying in relative intensity, of course, in different countries. If, however, one examines the history of that period from which the substantial growth of nationalization really dates, namely, the third quarter of the nineteenth century, the importance of political motives in promoting this movement is very conspicuous. Thus, in Belgium, as in Switzerland a quarter of a century later, the fear of foreign financial control of the railway system was a powerful factor in inducing the resumption of state activity in the railway industry. In Austria and Italy the relation of the state railway system to political harmony and to military strength was regarded as a very important one. Because of this fact, the rehabilitation of state railway systems inaugurated in the decade 1868 to 1878 must not be

viewed as a vindication, justified by the history of the previous generation, of the economic benefits of state as against private management of railways. The record of state railway management up to that time had been a very discouraging one. In Belgium, for instance, for five years after the opening of her first mileage, the state constructed and operated all railways, but the financial results were so unsatisfactory that the extension of the system was entrusted to private enterprise. In Austria and Prussia the inability of the state to secure adequate financial returns from its railways led to the temporary abandonment of the policy of state expansion. Similar experiences, it will be remembered, were the lot of certain states of this Union. There were no facts in 1870 which could be adduced to establish the economic advantage of state railway systems. On the other hand, there were conspicuous examples of the successful working of private roads in America, in England, and even in continental Europe. At the very time when the Prussian Diet expressed itself in favor of continuing further with the project of a national system, private enterprise was clamoring for railway concessions, in spite of all restrictions that the government had imposed upon construction and working. One of the considerations that induced the Belgian government in 1871, to resume its railway activities was the too successful competition of the private companies with the state lines. Some companies, it is true, had not met with success, but the financial failures of such roads seem to have been mainly due either to the excessive restriction of government constitutionally inclined to paternalism or to the fact that they had been located, under the influence of the state, in regions of scanty population and poor economic possibilities.

The desire of relatively undeveloped communities to hasten the natural growth of their estates is not a surprising one, nor is it strange that they should select the state management of railways as their means to that end. Whether their object is best attained in this way is another matter. The construction of a larger amount of railway mileage may be

thus secured, with attaching increments of traffic, but this does not in itself justify the policy. The direct financial losses usually involved, the indirect losses arising from an arbitrary diversion of national resources of labor and capital from other interests, the effect of the distraction of the attention of the government from those very important elements of national welfare which are not economic, the possibility of the stimulation of private enterprise, under judicious supervision and with suitable aid, into the accomplishment of its aims, all need to be taken into full account; but unfortunately, such communities rarely stop to cast a trial balance of gains and losses.

Such are some of the leading influences that have led toward nationalization, each one of which would form a most interesting study. Obviously, only the bare outlines of the general movement could be sketched in this paper, sufficiently distinctly, may the wish be expressed, to indicate that from the point of view of permanent welfare, there is still justification for further discussion of a problem which practical politics has declared settled.

The leading aspects of such a discussion are twofold, (1), the effect of the state upon the railway, (2) the effect of the railway upon the state. Under the former head falls the question of the financial remunerativeness of state railways, an important, though not conclusive, test of efficiency. Generally speaking, the results have been poor. For instance, in 1907, quite a favorable year for railway traffic, the state systems of Europe, excluding Prussia and Saxony, earned possibly 3 per cent upon their reputed capitals. Thus France (*l'ancien reseau de l'Etat*) made 1.87 per cent, Italy 2.18, Norway 2.64; Sweden 2.75, Denmark 2.92, Wurtemberg 2.47, Austria 3.01, Belgium 3.29, Bavaria 3.45, Hungary 3.50, Imperial Railways of Alsace-Lorraine 3.58, Switzerland 3.62, Baden 3.90 per cent. In 1908, when the effects of the economic depression which commenced in the United States in the fall of 1907 really began to be felt, the average return fell considerably below 3 per cent. Such results indicate that most of these railways, on a proper representation of

capital probably all of them, were actual burdens upon the finances of their respective states, for the latter have usually had to pay from $3\frac{1}{2}$ to 4 per cent, or even more, for the necessary capital. It has been urged that most of the state railway systems of Europe show little or no financial success because the governments have used their railways, not for purposes of gain, but for the promotion of trade and industry by low transportation charges. The argument is a very sophistical one. If this were a characteristic of state management, then the most important state railway administration, that of Prussia, would not have been paying dividends of 5, 6 and 7 per cent for the last thirty years. Bismarck, it is true, promised the Prussian Diet that if the purchases of the private railways were authorized, railway surpluses should be used for improvement of the system, not for the financial benefit of the treasury. But fat railway surpluses have proved too much even for Prussian self-restraint, and the state has hugely enjoyed them. There is not a railway-owning government of Europe but would be glad to secure help to its national finances from the profits of railway working. The low railway charges of such countries, in so far as they are low, are to be largely credited to the irresistible pressure of very limited individual purchasing power. But while passenger rates are low, there is reason to doubt whether this can be said of freight rates, an adjustment which savors more of political expediency than of economic advantage. Attempts to make state railways more profitable have not been unknown. But recently, Austria and Hungary have appreciably raised their charges. Russia, Denmark and other states, at different times, have made general increases, in some instances realizing to their discomfiture that such increases may destroy sufficient traffic to leave unaltered, or even reduce, gross revenue. In countries where the average income of the great mass of the population is low, charges that appear low from the standpoint of, say, an American, may actually be as high as the traffic can be made to bear. It is not denied that, in a number of instances, the taking over of private lines has

been signalized by some reduction of rates and fares, a preliminary taste as it were of the future good things that the government had in reserve, but the process has hardly been a continuing one. Take, for instance, the state railway system of France, as against the private companies, and one finds that, whereas, from 1888 to 1908, the state receipts per ton kilometre increased from 5.15 to 5.23 centimes, those of the private companies fell from 5.66 to 4.20 centimes. Even in passenger kilometre receipts, the favorite altar for the propitiatory sacrifices of government, the decrease in the state system was but 9¾ per cent as against 28 per cent in the case of the private companies. The passenger receipts of the state are still slightly the lower, though part of the difference can be put down to its appreciably higher proportion of third class traffic.

Saxony has had somewhat better fortune than the states just dealt with, for though the percentage earned on reputed capital was but 3.78 in 1908, for some few years preceding 4 and 5 per cent surpluses were the rule. Prussia, however, is the one example of marked financial success over a period of considerable length. This unusual achievement was favored by the fact that active state control was undertaken just about the time when the great economic advance of Germany was commencing. Financial prosperity was assured ahead. It is fair to inquire whether, under such conditions, the Prussian state railways have accomplished for the economic development of their country all that might reasonably have been expected from them.

Despite statistics showing the growth of the commerce and industry of Prussia, which prove nothing, as no one can tell what would have been the result with a different system of management, I am inclined to think that they have not done so. So far as my reasons for this opinion can be expressed in brief, they are as follows: Prussia is operating her railway system under peculiarly advantageous conditions, namely, compact territory, dense population, favorable physiographic conditions, unity of railway management arising from the fact of state operation, low labor cost, low

taxation, a people temperamentally and by military training inclined to take severe restrictive control as a matter of course. For instance, Prussia has five times as many people per mile of line and twice as many miles of line per unit of area as the United States. The enormous physical obstacles to economical operation offered by the Rocky Mountains are absent. The practical monopoly enjoyed obviates many expenses of organization and of competition for traffic. Taxes per mile of line are little more than half those of the United States. Railway labor—cost per individual averages about half that of this country. Add to these the high average intelligence of its people and the rapidity of economic progress, and all the elements of efficient and economic operation, making easy the combination of very low charges with high rates of profits, are present. Yet what has been accomplished? For one thing comes the reply, extraordinarily low passenger rates, rather less than one cent per passenger mile, in 1908 as against 1.9 cents in the United States. But there are several points to be noted in connection with this. In the first place, Prussia, with its denser population, affords to the railways a passenger density of four and a half times that of the United States, and such enormously greater density, in the case of traffic that handles itself, lowers the cost per mile very considerably. In the second place, the third, and especially the fourth class in Prussia, represent facilities which the average American traveler would not put up with for the small annual amount he would thereby save. In the third place, the cheapest accommodation that can be properly compared with that of American passenger trains, the second class, averages 1.6 cents per passenger mile, a charge that represents quite as much to the average German as 1.9 cents does to the average American. In the fourth place, though operating costs are low, there is ground for suspicion that Prussian fourth class rates are more helpful politically to the government than profitable to the railway. Passengers, however, bring in but 28 per cent or so of total operating income, while freight traffic produces about 65 per cent, a similar ratio to that of

the United States. Moreover, of the two branches of the service, freight traffic is the one which calls for the exercise of most skill; it is also readily susceptible to reductions of cost. The Prussian Railway Department seems to have failed to realize its opportunities. From 1880-1908 freight transportation charges in Prussia decreased about 15 per cent. In the United States, during the same period, they decreased nearly 40 per cent. The average ton mile receipt of Prussian railways, in 1908, was 1.24 cents; in the United States .754 cents, nearly 40 per cent less, really about 60 to 65 per cent less if equivalent purchasing power be taken into account. The Ausnahme tariffs, covering wagon loads of 22,000 pounds and over, and accounting for 21.144 million ton kilometres out of a total of 32,810 million, very largely coal, ores, lumber, stone, earth, raw materials and grain, worked out at an average receipt per ton mile of 90 cents, in spite of the depressing influence of political export rates, a figure very appreciably higher than the average for all classes of goods here. The normal tariffs for wagon loads, accounting for 9600 million ton kilometres, gave an average receipt of 1.5 cents per ton mile. These figures are only averages and easily liable to misinterpretation, but the differences indicated are so great as hardly to leave room for any doubt as to the superior economy of American freight transportation to its users. There is a much closer similarity in the general makeup of the tonnage than some writers have supposed. Nor can the difference in average haul have any greatly disturbing effect on the comparison, for the great bulk of the tonnage in both countries is low class carload traffic, loaded and unloaded by shippers and consignees. Terminal charges for handling this class of traffic are comparatively light, and therefore cannot be responsible for the difference of costs such as occurs in short and long distance hauls of freight that has to be loaded and unloaded by the railway. Then it has to be borne in mind, in connection with this carload freight, that increase in length of haul means increase in the number of division yards that have to be passed through, involving rehandling in the case

of most trains; also that wages of enginemen and trainmen, cost of fuel and supplies, and cost of maintenance of rolling stock tend to keep pace, more or less exactly, with increase of haul. The density of freight traffic, it should be observed, is nearly the same in both countries.

Further, throughout the whole comparison, the different wage costs need to be borne in mind. In the United States, 60 per cent of total operating expenses is consumed by wages and salaries, and the average rate of pay of the American railway employee runs at least 100 per cent greater than that of Prussian employees, including all allowances and so forth. This means that, if American employees were paid on the same basis as Prussian, freight rates could be reduced to just half Prussian rates and passenger rates to the same level, while net income would actually be greater than it is now.

The contrast between the freight and passenger rates of Prussia is such as inevitably to create the impression that the former constitute more or less of a tax upon facilities, and this feeling is emphasized when one bears in mind the severe restrictions, such as those of the demurrage and loading regulations, to which the freight traffic is subjected. It may be good political policy to maintain passenger fares at a low level, but, if this means that profits have to be bolstered up at the expense of freight charges, it is unfortunate. Since an infinitely smaller proportion of the income of the average individual is spent on railway passenger traffic than on freight transportation, low passenger fares are, in general, of much less economic importance to the community than low freight charges.

Yet, in some ways, the railway administration of Prussia has been inclined to push economy to the extreme. In 1906 an expenditure of \$50,000,000 on equipment was authorized, and much has been made of this action as an illustration of the advanced policy of enlightened state management. But, as a matter of fact, the conditions of car service had become absolutely lamentable, and the government did not undertake this expenditure until it was actually unavoidable. The

1907 report of the Chamber of Commerce of Essen says " * * * the increase of our roadway accomodations, and the provision of rolling stock, etc., has not taken place in a manner corresponding to the development and the necessities of traffic, and further, * * * no progress of general importance has been made in the matter of our goods traffic." Charges of this kind are common in the history of the Prussian state railways. Ten years ago, Professor Dr. Arthur Bohltingk, in his pamphlet "Unsere Deutschen Eisenbahnen," wrote "Although his Excellency Von Thielen has not once been able to provide sufficiently for the demands for rail transport, and although he has repeatedly declared that the railways had reached the limits of their capacity, he seems to have thought less than ever of making them equal to such demands by means of additions and improvements."

Short of an exhaustive analysis impracticable within the limits of this paper, sufficient evidence has been brought forward, perhaps, to indicate how little reliance can be placed upon the argument for nationalization which is based on the results of Prussian railway management. In spite of all its apparent success, I am convinced that the state government has failed to live up to its opportunities. With all the disadvantages and defects of the privately managed American railway system, and notwithstanding the restrictions placed upon its working by federal and state governments, it has contributed far more to national economic development than has the state system of railways in Prussia.

There are certain other features of state railway management, a brief statement of which must suffice, though their importance is considerable. There can be no question but that, where economic conditions render it at all practicable, state railways will endeavor to make profits. The history of Prussia indicates very clearly that, under such circumstances, there is a great probability of too intimate a relationship being established between the financial and railway departments of the state. This is likely to lead, as it has led in Prussia, to a subordination of the economic interests of the industry to the fiscal necessities of the treasury.

Again, with the nationalization of the railway system, the experts of that branch of industry become government servants, and as such, liable to less searching criticisms than, when, as the representatives of private enterprise, the sword of government investigation and regulation was constantly suspended above their heads. Like individuals, government is not apt to criticise itself. The depressing effect of government management upon the initiative and self reliance of employees is an old charge, and I will do no more than quote from the report of the recent Board of Trade investigation of Italian railways. "There is one element in connection with the transfer from private working, and that is the change which has taken place in the management of the personnel. Numerous removals have been effected consequent on promotions being made in order of seniority, which is not in all cases compatible with merit. One hears traders who have had close associations with the officials, in the days of private ownership, deploring the disadvantages caused by the removal of local officials possessing intimate knowledge of the working and their replacement by officials from probably quite a different part of the country owing to some claim of seniority. Again, in the staff themselves, there has been noticed, it is said, a change occasioned by the transfer from private to state ownership. As state officials, there does not seem to be quite the same amount of willingness to take responsibility; the strict letter of the rules and regulations is the boundary line over which there is no disposition to step."

So much for the influence of state management upon the railway. We may now ask what is the effect of the state railway upon general state administration. This question is worthy of a much more elaborate answer than I can possibly give at the present time, and I shall not attempt to do more than outline some of the leading considerations. First, then, the entry of the state into general or specific industrial competition, with its own citizens is neither wise nor proper. Its natural position as the disinterested and unbiased dispenser of justice, revealer of frauds, and adjuster

of inequities is prejudiced thereby. Confidence in its impartiality becomes weakened, capital hesitant, private initiative less keen, with corresponding retardation of the material growth of the community. Secondly, the duties necessarily imposed upon the executive of the modern state in connection with the fundamental functions of administration of justice, protection of the community from physical and moral violence, whether in social or strictly economic relations, and guardianship of its physical and mental health, constitute a heavy burden in themselves; and an efficient discharge thereof is far from being attained in the most advanced countries. To superimpose upon these duties the responsibilities of industrial entrepreneur is to diffuse the energies of the state through a still wider field, over which it is likely to exercise a still less satisfactory control. The capacity of government is not unlimited. Thirdly, in so far as the railways are productive of surpluses, to that extent the executive of the state is relieved from drawing upon the pockets of the taxpayers. It is admittedly difficult even in the most democratic states to keep the executive in responsive relationship to the legislature and to the public. The more dependent the executive is upon funds raised by taxation, particularly direct taxation, the less arbitrary can it become. The ultimate political well-being of the democracy rests upon the practical recognition of this canon of government. Fourthly, fiscal reliance upon railway earnings is apt to prove embarrassing in state finances, at recurring periods, from shrinking of receipts—a difficulty that is accentuated by the apparent inability of government railways to adjust themselves readily to economic vicissitudes.

From the point of view either of the influence of the state upon the efficient management of the railway system, or of the influence of the responsibility of railway management, upon the efficiency of state administration, there is reason to dispute the advantage so loudly claimed for nationalization. The real meaning of railway nationalization is the substitution of uncontrolled state management for controlled private management, and the change is unfavorable to economic progress and efficient government.

McClure's. 38: 352-60. January, 1912.

Industrial Democracy or Monopoly? William W. Cook.

To preserve competition in the face of the underlying forces of trade is impossible. To remain permanently in the present control of private monopoly is equally so. The alternative most prominently in the public mind is government ownership of the railroads. The American people do not want this, but they believe it may be necessary.

The railroads of continental Europe are quite generally under government ownership. That this ownership has developed and is now developing grievous faults, cannot be denied. Perhaps the most authoritative recent study of this situation is given by Logan G. McPherson, lecturer on transportation in Johns Hopkins University, in a volume published in 1910. His conclusions are decidedly adverse to the policy of government ownership. "In France, Belgium and Italy," he says, "where socialistic influences are strong in the government, the number of employees of the governmental railways has been increased beyond all reason to make places for political henchmen, with the result that expenses are going up, revenue is going down, and the quality of service, from all accounts, is badly deteriorating." "In Switzerland," he says, "where the government has sought to please all the people by lowering rates, increasing facilities and raising wages, the railways which were doing well under corporate management show a deficit after ten years of governmental administration. . . . In Switzerland, if anywhere, it might be supposed the operation of railways ought to be attended with profit. Under a state administration they show a loss."

This is the result of the experiment under the most centralized governments of Europe. In the United States, a loosely constructed democracy extending over an enormous territory, the problem would be much more difficult. Experience in this country has shown that popular sovereignty is not fitted to own and administer great properties. Popular sovereignty, with ignorance and poverty in control, early

bankrupted a number of the Southern States, and almost bankrupted many in the north. Popular sovereignty bankrupted American cities like Elizabeth, New Jersey, and Memphis, Tennessee; and in the great development of municipal enterprises in recent years it has piled up in American cities a portentous burden of debt, \$1,718,000,000 in 1908, according to the United States Bureau of the Census—that is, over one half of the national debt at the close of the Civil War, when intelligent men despaired of the nation's solvency. Were it not for constitutional limitations and prohibitions, these city debts would be greater still.

Public ownership of railroads and other means of transportation are not untried experiments in the United States; indeed, at the beginning the transportation enterprises of the country were quite largely undertaken or aided by states or cities. With scarcely an exception, these experiments were failures. Judge Thomas M. Cooley, in his history of Michigan, gives a graphic account of that state's disastrous experience with railroads and canals, drawn from his own observation. "At the end," he says, "nothing but the debris of our air-castles remained, and that only to plague our recollections."

The result of all this is that government ownership of railroads in the United States is now generally feared by its citizens. The effects are dreaded. It would mean an enormous increase of power and patronage to the national government. It would mean that the government would be swindled in acquiring the railroads. It would mean bad service, stagnation of enterprise, and financial loss. It would mean inefficient and at times corrupt administration of the railroads. These enterprises require the highest class of administrative ability and economy in their operation. Politicians do not and can not furnish that ability. Railroad men are trained for their vocation by a lifetime of constant practical work. The government would not get such men, because they are not politicians and because the government would not pay the price to retain them.

But worse than all, the change would mean a national

debt of some fourteen billions of dollars, the present value of the railroads themselves. Nor is this all. Over a half billion dollars a year is being added annually to the value of the railroads from the sale of stocks and bonds. In a few years the national debt would be twenty-five billions of dollars. Such a debt would be appalling. The solvency of the republic would be imperiled. The words of Maine, the author of "The Ancient Law," and "Popular Government," should be recalled by all of us at this time. Popular sovereignty, he says, "is characterized by great fragility," and democracy "of all forms of government is by far the most difficult"—so difficult that it "will tax to the utmost all the political sagacity and statesmanship of the world to keep it from misfortune." When one contemplates the colossal debt, the inevitable political corruption, and the oligarchic tendencies of governmental power, doubt arises as to whether the great republic could stand the strain of government ownership of railroads.

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Switzerland's Railway Success.

We subscribe to no such dogma as the "impossibility" or "absurdity" of government ownership or management of public utilities. It is all a question of expediency—a question, to be sure, turning often on extremely broad and deep considerations, and not merely on the immediate facts of a given case, but still a question of expediency. It is fair to acknowledge, and to take for what it is worth, such an experience as that of Switzerland, especially as Switzerland is a democratic republic. But before we jump to conclusions regarding our own country, we must look certain large and vital facts in the face. Of these, the most obvious relates to the mere geography and history of the country. The United States is a vast new country, whose area—we speak of the contiguous territory, not counting Alaska, or the in-

sular possessions—is 3,000,000 square miles; Switzerland is an ancient and fully settled country, with an area of 16,000 square miles. Texas alone could swallow up sixteen Switzerlands, and the population of Texas is barely more than that of Switzerland. It would take nine Switzerlands to make a Montana, but the people of Montana are only one-tenth as many as those of Switzerland. Evidently, the problem of reconciling the demands of the present, and of weighing the needs of the future, for this vast Continental area, filled with a restless, energetic and rapidly growing population and big with mighty changes almost from year to year, is not to be compared with that presented by the transportation problems of the compact and ancient little mountain republic of Europe.

Hardly less important than this, if less important at all, is the consideration of the nature, the temper, and the traditions of the people. Now anything more unlike the American temperament than that of the Swiss people it would be difficult to find. And it is hard to say whether this difference is more pronounced if we consider as American that which was the recognized American type of the earlier generations of our republic, or that wonderful cosmopolitan mixture which now plays so large a part in the development of our social and economic problems. Take it as you will, and you have here a tense, nervous, high-strung people, keenly ambitious and eager for quick "results," as against a nation which, whether in the country or the city, is essentially a nation of sturdy yeomen. It is needless to expatiate on this idea; anybody can supply a score of particulars to reinforce the contrast. Rather let us take, as a slight illustration, the plain tale told by the writer of the *Quarterly Journal* article, narrating the history of the addition made to the standard wage scale on account of the rise in the cost of living:

The highest rates of wages in effect upon the private railways (which were the basis of the governmental rates) had been established in 1896 and the rise in the cost of living since then amounted to over 27 per cent. The men began to complain respectfully, but during 1906 with increasing vigor. The government, when confronted by the men with family budgets and other pertinent evidence of the fall in real wages, recognized the justice of their claims, but wished to postpone the revision

of their wages until a general act could be prepared that would apply to all federal employees. . . . The federal council ultimately recommended that each married employee and each unmarried employee with persons dependent upon him for support, earning less than 4000 francs a year, should receive a supplement to his annual earnings of 100 francs (\$20); and that all other employees earning less than 4000 francs should receive 50 francs (\$10). The federal council took pains in its message to the assembly to remark on the courteous tone of the employees' petitions and the reasonableness of their request.

Can any one imagine such a story told of a like situation in the United States? And is it not equally impossible—going back to the other phase of the matter—to imagine any mechanism of official management which would eliminate here, as seems to have been done in Switzerland, the pressure of personal and local interests, in the face of the overwhelming importance of transportation questions in this country?

Journal of Political Economy. 3: 1-23. December, 1894.

State Railways in Australia. William Hill.

In every particular, unless it be that of holding railway building and the development of the colony in check, state management has proved less efficient in Victoria than private management has been here. Railways are built more slowly and at greater expense. Their charges are higher; yet their management is less efficient so that the net returns are poorer. But it is not from the direct effects of state ownership alone that the policy deserves condemnation. The indirect effects appear to be even more pernicious. These may be classed under two heads: (1) Borrowing until the state debt is increased beyond any reasonable limit; (2) leading the people to depend upon the government for employment with little regard to the product of their labor. This compels the government to continue building after all lines that could be profitably constructed are completed. Labor is not alone in its dependence upon the government. The whole community learns to rely upon the government policy of borrowing for a continuance of its apparent prosperity.

Quarterly Journal of Economics. 23: 652-96. August, 1909.

Railways in New Zealand. James E. Rossignol and William D. Stewart.

Because of the general prosperity of the country, to which the railways have, of course, contributed, the gross revenue of the system has increased from £1,150,851 in 1895 to £2,761,938 in 1908. The revenue per mile of line has increased from £577 to £1,114, while the revenue per train-mile has increased from 85.75d to 93.75d. But the expenditure has increased in still greater proportion: the expenditure per mile of line from £367 to £796, the expenditure per train-mile from 63.62d to 70.59d. The gross earnings per train-mile exceed those of all the Australian railways except Victoria, and the expenditure per train-mile is greater than that of all of them, without exception. Had it not been for a fall in the rate of interest on government loans since 1895, from 4.1 per cent to 3.7 per cent, the deficit for 1907-1908, figured on the basis of the "capital cost" of the open lines, would have been £184,352 instead of £89,349, as it now is.

The Railways Statement, presented annually to Parliament by the minister for railways, does not recognize the existence of a deficit, but shows a "net profit on working," so called, without noting that it is always insufficient to pay interest on the cost of construction at the average rate of interest paid by the government on the public debt. In the year ending March 31, 1908, the railways earned a "net profit" of 3.33 per cent on £24,365,647, the cost of construction of the open lines, but, since the average rate of interest paid on the public debt was about 3.7 per cent, the "net profit" is absorbed in interest payments, and a deficit emerges, amounting to £89,349, if interest is reckoned on the cost of the open lines only. But the real cost of construction of the railway system, on which interest should be reckoned, includes the cost of the unopened lines, making a total of £26,735,140, reducing the "net profit" to 3.04 per

cent and increasing the deficit to £177,021. This is considerably less than the deficits during the administration of the commissioners, which, in their turn, were less than those of their predecessors, but, as shown above, the reduction has been chiefly due to a fall in the rate of interest, with which the railway administration as such has had nothing to do. Reckoning interest on the cost of the open lines only, the total deficit from 1895 to 1908 amounts to £1,134,447; from 1882 to 1908 it is £4,256,025 (\$20,000,000). Taking interest on the cost of the unopened lines as well, the deficit is increased by at least 50 per cent.

Undoubtedly, wages and salaries have been slightly increased from time to time, to keep pace in a measure with the general increase in wages and cost of living in New Zealand and throughout the world, and this has caused an increase in expenditure, offset, however, by increased revenue, due to the general prosperity of the country. But such increases can hardly be regarded as voluntary "concessions," or gifts, since even now the railway employees, if one may believe the Amalgamated Society of Railway Servants, and their organ, the *Railway Review*, are receiving wages rather less than those paid in private employ, while their hours of labor are frequently much higher than would be tolerated in any private business subject to the jurisdiction of the arbitration Court. There are only thirty-one officials who receive salaries of £400 (\$2,000) or more. The general manager receives a salary of £1,250 (\$6,200) the chief engineer £900, the chief traffic manager £800, the traffic superintendent £650, the chief clerk £500. The most highly paid station master, a man who has been in the service for forty years, receives only £355 (\$1,720). Station masters receive from £170 (\$730) to £355, ordinary clerks from £170 to £300, cadets from £40 to £100, guards from 8s. (\$2.00) to 10s. (\$2.50) a day, enginemen from 10s. 6d. (\$2.60) to 12s. (\$3) a day, firemen from 7s. 6d. (\$1.85) to 9s. (\$2.25), carpenters from 9s. to 10s. 6d., blacksmiths from 10s. to 12s., common laborers generally 7s. (\$1.75) a day. Salaries and wages are now slightly higher

than they were in 1907, but there is no evidence to show that any material concessions have been made to railway employees. However they have the advantage of regularity of employment and of retiring allowances under the superannuation system.

One of the most serious causes of inefficiency and dissatisfaction is the system of promotion. Men are usually promoted merely because their names come first on the list of seniority, unless it can be proved that they are actually incapable, which is difficult. The theoretical right to advance capable men over their seniors is practically never exercised, because of the unpleasantness and difficulty of proving alleged unfitness. Until a system of promotion by merit is introduced, there will never be an efficient service. Yet promotion by merit lends itself readily to favoritism and other abuses. Again, members of the service, even cadets, frequently have political influence back of them and this interferes seriously with discipline. Also workers in the government shops have frequently been accused of practicing the "government stroke." The general manager himself, Mr. T. Ronayne, recently wrote a strong letter to the chief mechanical engineer at the Addington workshops, making serious charges of inefficiency. However, when the commission appointed to investigate the charges met at Christchurch on March 11, 1909, the general manager said that he had been misinformed and that he was perfectly satisfied with the condition of the workshops. Yet in the course of the investigation certain significant facts were brought out, such as the difficulty of getting rid of inefficient men, the difficulty of getting good men when needed, the lack of encouragement to inventors and other good men by promotion and advances in salary, and the lack of up to date appliances in certain lines of work.

The financial failure of the railways has been one of the chief causes of the slow growth of railways during the past thirty years. From 1873 to 1878 nearly 1,000 miles of line were built, an average of about 200 miles a year; but in the thirty years from 1878 to 1908 only 1,385 miles were

built, an average of only 45 miles a year. This average would be fairly high if the railway system were practically complete and only a few minor extensions had to be made from time to time. But such is not the case. A section of the main trunk line between Auckland and Wellington, about 200 miles in length, has taken twenty-three years to build, altho it was the most important link in the whole system, and promised to develop a large and profitable traffic. "Apart from the fact that this dilatory method of construction has added enormously to the cost, it is appalling to think of the huge sum which the Dominion has paid in interest during construction, to say nothing of the returns which might have been gathered in and the settlement which would have been promoted, had the work been completed with reasonable dispatch.

The causes of this delay and loss have been chiefly two. In the first place, the funds available for railway construction have been distributed, not to say frittered away, in various parts of the country, in the building of small bits of line, instead of being concentrated on one or two important works. This was largely due to political considerations. Secondly, the funds at the disposal of the government were limited, because the government could not advantageously borrow more than a certain amount every year, altho much larger sums were urgently required. If the railways already built had been paying investments, earning the full interest on the capital cost, and perhaps, a surplus to apply to betterments, a considerable sum now borrowed for "additions to open lines" would have been available for new construction, and it would have been easy to borrow all the money needed for projected lines if only they promised, in their turn, to become paying investments. Thus the districts already supplied with railways, by their narrow and selfish policy, have not only compelled the people who had no railways to contribute to the deficit, but have for years prevented the people from getting railways in districts that could be developed and could supply a profitable traffic.

The government is in a difficult situation: Here an undeveloped district is crying for a railway, there a rich and prosperous population is clamoring for concessions of every kind. On the one hand, the railway servants demand higher wages and shorter hours; on the other, the Department of Labor asks that railway construction be made subordinate to the provision of work for the unemployed. And yet the financial critics expect the railways to pay interest on the capital cost and earn a surplus for "additions to open lines."

ADDITIONAL REPRINTS

Railway Age Gazette. 56: 9-10. January 2, 1914.

Is Government Ownership in Sight?

John J. Esch.

Prior to about fifteen years ago, there was little discussion of and practically no demand for government ownership of railroads in the United States. One of the most significant trends of the public thought of today is the growing demand for such ownership, and this, too, notwithstanding the efforts made by the federal government, as well as state authorities, through regulation, to forestall such action. It is not my purpose to set forth the causes for this growing demand. I wish merely to call attention to what I consider some of the salient factors in its evolution.

By the Spooner act, approved June 28, 1892, the President was authorized to purchase from the French Maritime Canal Company, for the sum of forty millions of dollars, all of its property and franchises, including the Panama Railroad. This railroad thereupon became the property of the United States, although retaining its corporate entity as the Panama Railroad Company. From the time of its purchase to the present, it has been practically maintained and operated by the government, and will continue so to be after the Panama Canal is in operation. Although this railroad has been used mainly as a necessary aid in the construction work of the canal, it has been doing an ever increasing commercial business and has been doing it successfully. The ownership and operation of this road by the government has accustomed our people in some measure to such a

policy and lessened, in some degree, the hostility thereto which generally existed throughout the country prior to its acquisition.

Another factor in aid of the propaganda for government ownership occurred at Madison Square Garden, August 20, 1906, when the present secretary of state, Mr. Bryan, upon his return from his trip around the world, declared:

"I have reached the conclusion that there will be no permanent relief on the railroad question from discrimination between individuals and between places, and from extortionate rates, until the railroads are the property of the government and operated by the government in the interests of the people."

This declaration was made less than two months after the enactment of the Hepburn act prohibiting discriminations as between places and individuals and giving the Interstate Commerce Commission full authority to regulate rates. Notwithstanding the beneficent effects of the Hepburn act and the more recent act of 1910 amending the Interstate Commerce Law, Mr. Bryan has not renounced the position he took in his speech at Madison Square Garden, and he is a most potent factor in the government today. That he crystallized the unexpressed thought of many citizens is doubtless true, although neither the Republican nor Democratic Party has given this policy its indorsement. In this connection, the fact must be noted that the Socialist Party, which believes in government ownership of public utilities, including railroads, is a growing party in the United States, and in the election of 1912 cast for its presidential electors over 900,000 votes.

Another factor which is leading our people along the line of government ownership of railroads and lessening hostility to it because of socialistic or paternalistic grounds, is the growing encroachment by the government in the field of private enterprise. The establishment of gun and ammunition factories and powder plants, and the present interest in the construction of an armor plate plant, are examples in point.

Another powerful factor which is advancing the govern-

ment ownership propaganda is the increasing demand on the part of municipalities throughout the United States for the ownership of public utilities, such as gas, electric, water and power plants. One municipality, San Francisco, has recently voted to take over a portion of its street car lines.

The present Congress, in legislation which is now pending, exhibits a marked tendency in the direction of ultimate government ownership. The House Committee on Post Offices and Post Roads, in the appropriation bill which it is about to report, recommends the appropriation of \$100,000 for the purchase by the government of railway postal cars, the justification therefor being that such ownership would reduce the cost of rent of cars now being paid by the government to the common carriers. Congressman Lewis of Maryland, in co-operation with the officials of the post office department, has drafted a bill providing for the purchase by the government of telephone lines, the same to be operated in connection with the postal business and under the direction of the post office department. The bill further provides that telegraph instruments be connected with the wires of these companies so that a telegraph business can also be conducted. This bill, or one of similar purpose, will have the endorsement of the postmaster-general and the President. It is significant that Postmaster-General Hitchcock, in the last administration, made a similar recommendation, but the same did not meet with the approval of the then President.

Most significant of all is the bill which is now being considered in the Senate and House, authorizing the President of the United States to locate, construct and operate a railroad or railroads in the territory of Alaska. Under this bill, the President has the power of detailing officers, hiring experts, letting contracts, constructing wharves and docks, and all other structures necessary in connection with the proposed lines. He is also authorized to receive compensation for the carriage of freight and passengers, and to have these lines "perform generally all the usual duties

of a common carrier, for hire." For the above purposes, the secretary of the treasury, upon the order of the President, is authorized, "to borrow on the credit of the United States, the sum of \$35,000,000 or so much thereof as may be necessary, and to prepare and issue therefor, coupon or registered bonds of the United States."

As a result of the financial difficulties of the Frisco and New Haven lines, Senator Kenyon of Iowa recently gave notice in the Senate that he would address the Senate on the question of government ownership of railroads, and seek to show, as reported in the press, some of the advantages that would inure from the adoption of such a policy.

Personally, I have never been in favor of government ownership of railroads within the United States, and have always sought to remedy the evils connected with their ownership and operation through regulation. Notwithstanding the regulatory statutes already enacted, evils, especially those arising out of their present and past financial control, continue to exist and hasten the trend toward government ownership. Such trend can be materially checked by giving to the Interstate Commerce Commission, or kindred body, full power over stock and bond issues.

Engineering Record. 69: 332. March 21, 1914.

Government Railroads for Alaska.

Congress has agreed in the matter of the Alaska railroad bill, the Senate confrères yielding to the House in the maximum amount of money to be spent and the means of raising it, and both Houses accepting the conference report. The President has signed the bill.

The bill authorizes the President to designate and cause to be located one or more railroad lines from open Pacific harbors on the southern coast of Alaska to navigable waters in the interior and to one or more coal fields. The lines are to aggregate not more than 1000 miles and cost not more than \$35,000,000. No provision is made for a bond issue, but an initial appropriation of \$1,000,000 is made, to be avail-

able, until spent. All moneys above maintenance and operating expenses derived from the disposal of land, coal, minerals or timber or from earnings of railroads, telegraph lines or telephone lines are to be paid into the U. S. Treasury, and a separate account of them is to be made and reported annually. Existing utilities may be leased or bought outright at figures not in excess of the actual physical values.

Report of Commission

It may be expected that the construction work will conform closely to the recommendations in the report submitted a year ago by the Alaska Railroad Commission, consisting of Maj. Jay J. Morrow, Corps of Engineers, U. S. A.; Alfred H. Brooks, of the U. S. Geological Survey; Civil Engineer Leonard M. Cox, U. S. Navy, and Colin M. Ingersoll, consulting engineer. This commission, appointed in August, 1912, went to Alaska in September and spent fifty-five days on the ground, studying the harbors, the topography and the existing railroad facilities, supplementing personal observations with information obtained from local records and from engineers. The routes proposed and the estimated costs are as follows: Chitina to Fairbanks, 313 miles, \$13,971,000; Bering River coal branch, 38 miles, \$2,054,000; Kern Creek to Susitna Valley, 115 miles \$5,209,500; Matanuska coal branch, 38 miles, \$1,616,000; Susitna Valley to Kuskokwim, 229 miles, \$12,760,500.

Comparison of Routes

The first-named and largest of these lines is one of several investigated having Fairbanks for their objective. The longest of these, Haines to Fairbanks, would be 638 miles and would cost \$28,000,000, according to the meager data available to the commission. It would not reach any coal fields. That from Valdez would be much shorter, but would also fail to reach any coal fields, as a branch to the Matanuska field from the east would involve heavy grades. From Seward the existing line to Kern Creek would be ex-

tended to Fairbanks with a short branch to the Matanuska field. It would require 391 miles of new construction, however, and cost \$17,708,000; while the line from Chitina, connecting by the existing line with the port of Cordova, would, as previously stated, be only 313 miles long and cost only \$13,971,000. Moreover, a branch to the Bering River coal fields would be preferable to the line from Katalla, because Katalla lacks a good harbor. Cordova, the commission thinks, has the best harbor available. The Cordova route to Fairbanks would also be the cheapest to operate.

For these reasons the commission favors the line from Cordova to Fairbanks to reach the tributary waters of the Yukon and the branch from the existing railroad to the Bering River coal field. It would, however, leave a large and important part of Alaska unprovided for. To obviate this the commission would extend the existing Seward-Kern Creek line to the Susitna Valley as soon as possible, and ultimately to the Kuskokwim. The commission would also build the branch to the Matanuska coal field to make this coal available for local use, even though not in a position to compete with the Bering coal for outside shipments.

The commission believes that the two railway systems which it thus recommends would at once advance development in the territory and result in the need for many branches. The report concludes with the statement that the commission "is unanimously of opinion that this development should be undertaken at once and prosecuted with vigor; that it cannot be accomplished without providing the railroads herein recommended under some system which will insure low transportation charges and the consequent rapid settlement of this new land and the utilization of its great resources."

Engineering News. 70: 1117. December 4, 1913.

State Purchase of Railways in Great Britain.

H. Raynar Wilson.

A step of the greatest possible moment to railways, ship-

pers and the traveling public in Great Britain has just been taken by the British government. Matters between the railroads and the shippers, and the railroads and their employees, have not been of the happiest for some time. For the time being there is no trouble with the men. That is pending and will probably come to a head some time next year when the amended conciliation scheme agreed to after the great railway strike of August, 1911, automatically expires—in November, 1914, to be exact. There is, therefore, no need at this time to refer to the relations with the men.

The traders have, for years, enjoyed many favors and privileges from railway companies for which they have not paid. They were the price paid by competing companies in order to obtain traffic. But in 1906 the railway interests in England agreed between themselves that this foolish competition should cease. Such privileges as free storage—excessive use of cars for storage, cartage, beyond the usual free limits, payment of excessive claims, etc., suddenly ceased. One change made was the establishment of a Joint Claims Committee which considered every claim sent in by a shipper and no company was allowed to pay a claim, however just, until it had been approved by this committee.

From the railway point of view all this was within the companies' rights and it abolished all preferential treatment. But the shipper did not like it as it added to the cost of his railway charges and he therefore protested to the government. This led to government inquiry in 1908 when the shippers stated their grievances and the companies tabled theirs. In 1909 another inquiry was held and out of these two investigations came certain recommendations affecting both shippers and railways.

Before these recommendations could be legislated upon, there came the railway strike of August, 1911, which arose out of serious dissatisfaction among the men as to their conditions of service. The government knew the position in which the companies were situated—that notwithstanding the greater cost of operation due to higher wages, they could

not raise their rates to meet this cost without being challenged and at considerable expense and delay, with a possible defeat in the end. To grant the men's demands, however, meant certain increase in expenses and so the government agreed to bring forward legislation to allow the companies to raise their rates sufficiently high to pay for the increased expense that granting the men's demands would involve.

Eighteen months ago the government brought in legislation in accordance with its promise and at the same time, incorporated clauses therein to meet the recommendations of the two inquiries named above. The shipping interests were, however, so determined in their opposition to the increase in rates that they wrecked the whole bill. As, however, the government had promised this legislation, Parliament had to swallow it, and that part of the bill was passed; but the shippers would not have the rest, even those clauses that were in their favor.

All this did not, of course, improve the relations between the two parties; and in debates on the above bill, representatives of the government admitted this and as a sort of step to secure the sanction of the bill, they promised an inquiry.

A Royal Commission has now been announced which is "to inquire into the relationship between the railway companies of Great Britain and the state in respect of matters other than safety of working and conditions of employment and to report what changes, if any, are desirable in that relationship."

The exact meaning of this was made clearer by a public speech made later by the President of the Board of Trade who is the head of that department of the government dealing with railways. He said that the terms of reference had been drawn very wide so that the Royal Commission would be able to deal with every aspect of the problem. It would be enabled to consider and report to what extent and in what way steps should be taken to improve the relations; how

far they should be based on a different foundation and even whether the state should itself undertake the responsibility of running the railways.

It has been too hastily concluded that the nationalization of British railways is the main purpose of the inquiry. This assumption is, no doubt, based on the wording "the relations between railway companies of Great Britain and the state" and finds confirmation in the remark of the President of the Board of Trade that the inquiry could cover the question whether the state should itself undertake the responsibility of running the railways. Such a step is, as yet, outside the bounds of practical politics although it must be admitted that the idea of state purchase has gained favor even among some high railroad officials. These latter, however, share these views, because they see that the taking over of the railways by the state would relieve the officers of the present onerous task of trying to please the public, to keep the men contented and to satisfy their stockholders, while subject to constant interference by the government in the interests of the shippers and the men.

Review of Reviews. 46: 585-93. November, 1912.

Canada's Government Railways: An Experiment in Public Ownership and Operation. Albert J. Beveridge.

This is not a preachment, it is a statement. It is not an argument for a theory; it is a report of the facts. The question of government ownership, settled in republican Switzerland and monarchical Germany, is freshly aroused in the United States by the necessity of our government building and operating an Alaskan railway to the coal fields. Thus Canada's experience in this important matter is invaluable to us.

Over two thousand miles of railway, main track and sidings, owned and operated by the government—that is the most striking political and economic fact in the Dominion.

The Intercolonial Railway, running from Montreal to the ocean ports of St. Johns, Halifax, and Sydney (and the narrow gauge serving Prince Edward Island), is purely a governmental affair.

With the exception of perhaps 120 miles, which the government bought from the Grand Trunk many years ago, every foot of this railway system was built by the government, provincial or national, precisely as our government now is building the Panama Canal. All but an insignificant part was built by Canada's national government.

Two Thousand Miles of Government Railroad

The main track alone of the Intercolonial (exclusive of sidings and of the Prince Edward Island Railway) is longer than the distance from New York to Kansas City; longer than from New York to St. Paul; longer than from New York to New Orleans; and about the same distance as from New York to Omaha. If you will imagine our own government owning and operating a railroad between New York and either of the points named, you will have substantially what the Canadian Government has done, and is doing, in the case of the Intercolonial Railway, so far as sheer distance is concerned.

Natural Handicaps

But such an American railway between these points would traverse a country with dense population and almost infinite resources, both in richness and variety, compared with the country served by the Intercolonial Railway of Canada. For the country through which the Canadian Government road runs has scanty population and its resources are extremely limited in richness, variety, and development compared with the country which any railroad serves running from New York to any of the points I have named.

The Canadian lines run through and tap an exclusively agricultural and lumber country, with some mining in Nova

Scotia, and therefore, the freight it carries is overwhelmingly of the products of the field, forest, and mine. But even these are small compared with the output of the region tapped by any American line I have mentioned.

Add to these great natural disadvantages of this Canadian Government road the fact that, for reasons flowing from its historic origin, it is built in a meandering manner which applies to no other road; and finally, the weightiest circumstance of all, that from its three eastern ocean termini to its western river terminus at Montreal it is subjected to the severest possible water competition, and you have some of the physical and commercial disadvantages to which no other similar length of railway in the world is subjected.

Yet, in spite of all this, and in spite of what is called its "political" management, this great railway enterprise of the Canadian Government is not a failure. Indeed, it may be said to be a success in its cost of construction and equipment, in its comparative rates, in the efficiency of its operation, in the excellence and safety of its service, and in the items of peculiar accommodation it affords the people which a commercial road never would give.

Low Construction Costs

What, then, of this extensive and long-continued experiment in government ownership and operation of railways on this side of the Atlantic?

While, as we shall see, the construction and equipment of the Intercolonial Railway are above the ordinary American road, if inferior to the best railways in the United States, yet its total cost has been less than the average cost of similar lines in this country. Up to the present year the Intercolonial Railway has cost \$92,273,073.51. That is to say, this sum of money is the total amount that has been spent on building and equipping the road—from preliminary survey clear through to the smallest item of rolling stock.

Most, if not all, American roads, having like grades, have required far greater sums of money for an equal amount of mileage and equipment. It is hard to make exact comparisons between the cost and equipment of privately built, owned, and operated roads and this Canadian Government built, owned and operated railway. For, in the case of the Intercolonial, the actual cost is known to a cent; there are no stocks and bonds; there have been no receiverships; there have been none of the complexities of railroad financing which makes it so hard to find out exactly what the building and equipping of any American road actually has cost, or even how much money has been put into the enterprise from first to last. Yet, even with these handicaps, we know that the Intercolonial Railway of Canada has cost materially less than the same amount of railway construction and equipment in our own country, with very few exceptions.

Character of Roadbed and Equipment

So much as to comparative cost. What now of the comparative excellence of construction? Certain portions of the Pennsylvania, New York Central, Chicago & Northwestern, and American roads of like character, are better ballasted than this Canadian Government railway; but the roadbed of the Intercolonial is better than the average of our American lines. Practically all of it is of large gravel well laid. Its bridges are of steel and stone. On its whole length there is not a single example of those wooden bridges, which, until yesterday, were the unsightly and dangerous characteristics of so many privately owned railroad lines.

This government railway uses eighty-pound rails, precisely as do all other standard lines, whether in the Republic or in the Dominion. I heard the frequent charge that the rails are not well fastened to the ties, and especially that the ties themselves are of poor material. In every instance, these charges came from the opponents of the government in power at the time I went over this railway; and it was said

that this serious matter was one result of "political" operation of the road—which important subject I shall examine in a moment.

An inspection of the ties and rails at many stations did not sustain this charge. I found the ties of as good material and the rails as securely fastened to them as you will find on most American railways, though not on our very best lines. Neither does the smooth running of the trains of the Intercolonial indicate this grave defect. And finally, the capital fact that the accidents on the Canadian Government road are no more numerous than on any other Canadian road, and fewer than on the average American lines, tends to prove that rails, ties, and fastenings, as well as the road-bed itself, are as good as on the majority of privately owned roads.

Its rolling stock is, of course, precisely the same as that of other Canadian and American roads. So are its shops and, indeed, its whole equipment. Its passenger service, too, equals the average of other roads, whether in this country or the Dominion. Its sleeping-car service is very good and its dining-car service is excellent—better, indeed, than our American dining-car service, except on a few of our crack trains.

An Unprofitable Enterprise

This Canadian Government railway cannot be said to be profitable. Usually there has been a deficit which the national treasury has had to supply. This is due to the nature of the country through which the road runs, the unscientific route it takes for commercial purposes, the peculiar local accommodations which it gives the people, the severe water competition from which it suffers, its lower rates for passengers and freight, and, until recently, the inability of the government to maintain the strictest business management on account of the "politics" with which it has been shackled.

Yet, with all these serious drawbacks, the net earnings of the road, paid by its managers to the receiver-general last

year, came to more than \$600,000; and this in spite of unusual expenditures on betterments and increase of employees. For example, within the last three years the wages of the road's employees have been increased \$300,000 and the number of men in the road's shops have been doubled. Of course, in computing this net revenue, no interest was charged off against capital account. If the road had had to pay interest on bonds and dividends on stock on its more than \$90,000,000 that have been spent in its construction and equipment, the revenues of the road would not nearly pay its expenses.

Low Freight and Passenger Rates

What now as to the rates? By taking the actual receipts and the exact ton mileage, and dividing the former by the latter, the precise rate per ton mile is found. According to this method, which is that adopted by all railroads, the rate per ton mile on the various Canadian roads is as follows:

Intercolonial.....	.553 cent
Canadian Pacific.....	.778 cent
Grand Trunk.....	.672 cent
Canadian Northern.....	.734 cent

This was the statement made by the Minister of Railways to the Canadian Parliament in March of this year and not questioned. So it appears that the Canadian Pacific rate per ton mile was 40.6 per cent. higher than that of the Intercolonial; the freight rates of the Grand Trunk were 21.5 per cent. higher, and those of the Canadian Northern 32.7 per cent. higher than those of the government owned and operated railway.

The Canadian Pacific, in the year 1909, earned on its freight business, \$58,904,060. Had this great railway derived the same income per ton mile on freight as the Intercolonial did on the freight it carried, the Canadian Pacific would have earned \$17,035,236 less from its freight business than it did. Conversely, if the government railway had received the

same income for freight per ton mile that the Canadian Pacific Railway received, the former would have earned \$2,485,000 more than it did earn.

Apply the same method of computation to passenger rates and we have the following result for the year 1910:

Intercolonial.....	1.691 cents
Canadian Pacific.....	1.821 cents
Grand Trunk.....	1.767 cents
Canadian Northern.....	2.184 cents

That is to say, the passenger rates of the Canadian Pacific, Grand Trunk, and Canadian Northern are from 4.5 to 29.1 per cent. higher than the passenger rate on the Intercolonial Railway. In 1910 the Canadian Pacific earned \$24,428,282 for carrying passengers; but if it had carried passengers at the rate charged by the government railway it would have received \$1,743,918 less than its income from this source. Or conversely, had the Intercolonial Railway charged the same passenger rate as the Canadian Pacific, it would have earned \$203,968 more than it did earn on its passenger service. In short, had the government railway charged the same for passengers and freight that the Canadian Pacific charged, the former would have earned \$3,389,246 more than it actually did earn, or enough to pay expenses, a small interest on its more than \$90,000,000 invested and have a fair surplus.

Low Operating Costs

Remember that this government road has not as much freight or passengers to carry as the other roads; that the freight is of low grade; that the road is burdened by the most rigorous water competition; that, in competing with the Canadian Pacific from Montreal to St. Johns, N. B., it must carry passengers and freight 250 miles for nothing because its route is that much longer than that of the latter road between these points. Considering these and other drawbacks it is surprising that this government road makes as good a showing as it does.

The cost of running a train one mile is the universal railway standard of measuring the expenses of railway administration. According to this method, it costs less to operate this Canadian Government railway than any other railway line in the Dominion. The cost of running a train one mile on the Intercolonial and on the three great private railway lines in Canada, is as follows:

Intercolonial.....	\$1.300
Canadian Pacific.....	1.504
Grand Trunk.....	1.817
Canadian Northern.....	1.581

In presenting these figures to Parliament, the Minister of Railways stated that they were "taken from the sworn returns of the railways indicated and are not open to question."

The Service Rendered

The road is not run as a commercial enterprise, but merely to serve the people. And it does serve them in ways which a purely commercial railway enterprise would not tolerate. An illustration: There are some trains on this Canadian Government road which make stops at points two and five miles apart—this to accommodate passengers, shippers of milk and other products. On the other hand, its fast trains make as good time as similar trains on other roads.

Yet there is criticism of the road's freight service. In the present year a member of Parliament complained, in debate on the floor of the House, that he could not get cars—that they came irregularly, too few at one time, too many at another. And it seems that this particular criticism is general and well founded.

But it is explained by a curious circumstance. The Intercolonial, it appears, sends hundreds of its cars into the United States especially during the season for moving wood pulp, and these cars then go all over our country. You will find Intercolonial cars in California and Florida, in Oregon and Virginia, in Iowa and Maine. There are 4000 Intercolonial freight cars now in the United States. And the

American roads send no cars back because the Intercolonial is not an international road. When the cars of other Canadian roads go laden into the United States, American cars are brought back in their place; for all of them either enter the United States at various points or else have direct traffic connection.

The principal objection to the government operation of this road is the interference of "practical politics" in its management. While, as I shall show, this is being overcome, still it has existed—still exists in diminishing measure.

"Politics" in Railroad Management

Just how have "politics" influenced the road's operation? Suppose a new section hand is needed, or any man in the lower grades of the road's service,—porter or sleeping-car conductor. In some places he is "recommended" by a member of Parliament who belongs to the party in power. In other places he is recommended by the local patronage committee of the dominant party. And when so "recommended" he is employed.

It is only fair to say that at the present time most of these employees are competent men. I hear that this always has been true, especially as to engineers. These and other employees, the nature of whose services requires it, undergo an examination as to eyesight, hearing, etc., exactly as the same classes of men must do on other roads. The higher grades of the service are filled by promotions from the lower grades.

One result of this political influence was the employment of too many men. Another, it is charged, was the excessive use of passes; also the practice of conductors failing to collect fares was habitual.

However, this evil of issuing passes and conductors permitting their friends to ride free is not peculiar to government operation of railways. Consider our own experience in the United States. Not until 1906 were we able to abolish the use of passes.

Railroad Supplies and Campaign Funds

Much graver charges are very freely made. It is said that no matter which party is in power, and therefore in control of the road's management, unnecessary sums will be expended, especially in the election years—which in Canada are every five years—for supplies. These supplies, it is declared, are not bought directly but through middlemen, and are, in many instances, of inferior quality.

"Of course, these orders are placed where they will do the most good," said one critic of the road. "No one who is not a supporter of the party in power ever gets any orders for supplies of every kind that are given by the Intercolonial Railway."

It is said that out of the profits made by those who thus sell supplies to the Intercolonial Railway, contributions to the governing party's campaign fund are expected to be paid and are paid—no matter which party is in power.

Yet these supplies are sold on bids. It is supposed that the lowest and best bidder gets the contract. Also, the letting of the contracts for supplies is subject to vigilant and hostile party scrutiny in open debate on the floor of Parliament. So is every item and detail of the road's expenditures and management; and this critical public examination is becoming sterner every year.

Not only do members of Parliament take the greatest liberties in asking questions or criticizing the government on any detail of the management of the road, but the people themselves do the like. During the debate in Parliament this year on one item of the road's operation, an honorable member wanted to know how much a freight car cost and why it was that the government road did not charge more than twenty-five cents a day for the use of its cars in the United States.

The Government Is Held to Strict Account

So you can see that the management of the road, for which the prevailing party is responsible, is harassed by the

opposition to the extent of their utmost ingenuity and vigilance. They hang like Cossacks on the flanks of the government every moment.

For, in a certain sense, the party in power runs this government railway. Under the Canadian system, so unlike ours, the party in power is literally and actually "the government." So it is responsible for the road's management.

The opposition party holds the party in power to the strictest possible accountability. It is hard to see, therefore, how dishonesty or political trickery can seriously affect the road's financial transactions.

It is a profoundly significant fact that the management of this road is rapidly becoming non-partisan in spite of its origin, in spite of the peculiar fierceness of Canadian partisan politics, and notwithstanding the Canadian party system of government.

Employees All Unionized

We now come to perhaps the most important feature of the road's operation,—the employees. In the case of a railway, the employment of whose men was so largely influenced by "politics" as the Intercolonial Railway, one would suppose that the employees would be inefficient. Very emphatically this is not the case. The great bulk of the employees take pride in their work. One does not hear any complaints of carelessness or shirking of duty by brakemen, firemen, or engineers, by section men, shopmen or telegraphers.

All employees on this government road are organized just as they are on the Swiss Government railways. The road is run exclusively by men who belong to some labor union. There is not an employee, I believe, in the whole service who does not belong to his appropriate labor organization.

Every brakeman on the Intercolonial Railway is a member of the Brotherhood of Railway Trainmen; every engineer is a member of the Brotherhood of Locomotive Engineers; every fireman is a member of the Brotherhood of Locomotive Firemen; every conductor is a member of the

Order of Railway Conductors. All these unions are American labor organizations,—organizations first formed in the United States and with their heaviest membership in the United States.

Then, in addition, a new union has been formed called the Canadian Brotherhood of Railway Employees. This union was formed for the purpose of taking in all railway employees who were not eligible to join any other union. So the sleeping-car conductors, the men in the dining-car service, etc., belong to this union. This Canadian Brotherhood of Railway Employees was first organized on this government railway.

"The organization of the laboring men who are employed on the Intercolonial Railway has had an excellent effect," said one informant, himself an employer of labor and none too friendly to the principles of trade unionism. "It is very certain," said he, "that organized labor has corrected many of the grosser abuses which 'politics' has injected into the road's operation."

"For example," he explained, "after the unions were thoroughly established among the railway's employees, it was impossible for politicians longer to cause the discharge of an efficient employee on political grounds. This had been practised before to a degree which, in the present day, would be scandalous.

"The labor unions sternly insisted that no employee of the Intercolonial Railway should be discharged except for a genuine cause. He had to be at fault. So the party in power—and this means the real power that runs the railway—was confronted with a civil service among the railway's employees and a militant civil service at that."

"Then, too," said the Premier of a province who belonged to the dominant party, "it was found to be bad politics to discharge men merely for the reasons of politics. The man discharged for that cause would become very bitter against those who discharged him and so would all of his relatives

and friends. All these would enlist their friends and so a public sentiment would spring up. Thus, it was found to be bad politics to discharge a man except for good cause."

It always has been impossible to touch engineers or telegraphers, except for inefficiency. That would be too dangerous as a sheer matter of safety in the operation of the road. But the net result of the organization of the employees on this government road has been to abolish politics in the discharge of men. The management of the road would not (even if it could) destroy the labor unions into which all its employees now are gathered.

Curiously enough there has been only one considerable strike on this government owned and operated road—and it was local and of small importance compared with the great strikes on our roads. More than once the men have applied for an increase of pay, but always the government and the men have agreed. Speaking by and large, the employees get about the same wages and are paid in about the same way as in the case of other roads.

The only case where the management of the road did not agree with the men who applied for increase of pay was in the case of the telegraphers. The railway management refused to increase the telegraphers' pay as much as they asked. They demanded, I believe, an increase of \$70,000 a year. The management offered \$25,000.

On the refusal of the men to accept this, both the management and the men agreed to ask for a board of conciliation under the Industrial Disputes Act and refer the whole matter to this board. The board was appointed, both sides heard, and speedily an award was made increasing the men's pay \$35,000 a year. With this award, both the men and the railway management were satisfied. So that this dispute was settled easily and speedily.

The older employees are being retired on pensions. The fund from which this pension is paid is contributed half by the railway and half by the men, and is quite generous in its amount.

The Government Railroad Kept Out of Industrial Undertakings

When it comes to entering into the profitable business enterprises, which pay other Canadian roads so well, the government road is manacled hand and foot. One notable feature of the Canadian Pacific and Canadian Northern is their system of hotels. By far the best hotels in Canada are railway hotels, and some of these are quite as good as any hotels in the world. This would be a profitable business for the Intercolonial Railway to undertake.

"But it does not do it," said a keen student of Canadian politics in general, and the Intercolonial Railway in particular, "because of politics. The management of the road, which in reality is the party in power, does not want to get the hotel-keepers down on it. If the Intercolonial should propose to go into the hotel business as the Canadian Pacific has done, every hotel along the route would instantly become opposition headquarters."

"But even if the operation of the road was thoroughly purged and cleansed of politics, there yet is a great and fundamental defect," said an unusually intelligent and well-informed business man, who is the president of the board of trade of one of the various cities served by the Intercolonial Railway. "That defect," he explained, "is this: The officials and management of the line cannot risk any of the government's money in developing a mine, for example: They cannot go into the lumber business. They must be very careful about extending their branches. They merely are salaried government officials earning their living by running the road and liable to have even that living stopped if they undertake any enterprise or do anything subjecting them to considerable criticism for a year or two."

"But," said an earnest defender of this government owned and operated railway, "after all, is this not right? You Americans seem to think so; for did you not pass a law only three or four years ago prohibiting your interstate railways

from doing other than railway business—such, for example, as the owning and operating of coal mines?”

It was the opinion of the practical business man, as it is that of many others in Canada, that while the government ownership and operation of railways may be all right for a thoroughly settled country, whose resources are fully developed and systematized, it is a bad thing for an undeveloped and thinly settled country.

Railway Age Gazette. 56: 455-6. March 6, 1914.

Government Railroad Mismanagement in Canada.

The report which a Canadian government commission has just made on the construction by another Canadian government commission of the National Transcontinental railway throws light on the question of government ownership of railways in the United States. The advocates of public ownership base their case largely on the fact that the government can borrow money at a lower rate than private corporations. From this they infer that a saving could be made in the total return paid on the investment. The inference does not necessarily follow from the premise. Whether the total return that would have to be paid on the capital would be less under government than under private ownership would depend not only on the rate of interest paid, but also on the amount of capital on which it was paid.

Suppose, for example, that the government could borrow at $3\frac{1}{2}$ per cent., while a private corporation would have to pay $4\frac{1}{2}$. Suppose, also, that a private corporation would build for \$35,000 a mile a railway which would cost the government \$45,000. In that event the return which would have to be paid on the railway capital per mile of line would be the same. Now, the report of the Canadian commission, which has been investigating the expenditures on the National Transcontinental, tends very forcibly to sustain the contention that government construction is pretty certain, at least in a democratic nation, to be more expensive

than private construction. This commission estimates that in the construction work done by the government no less than \$40,000,000 has been wasted. As the line is not yet finished, and as the original estimate of its cost was only \$61,500,000, the saving made by the use of the government's credit will, if this report is correct, be a mere bagatelle, compared with the loss caused by wasteful government management.

While in form somewhat different, in essentials the governments of Canada and of the United States are very similar. Politics over the line is very similar to what it is in this country, except that heretofore it has been regarded as being cleaner there. Consequently, the results of the experiments with government ownership in Canada probably indicate faithfully what the results would be in this country. It is, therefore, desirable that the people of the United States clearly understand just what has occurred in Canada.

Stated briefly, it was considered desirable that another transcontinental line should be built in Canada. It was decided that the Grand Trunk Railway, under the name of the Grand Trunk Pacific Company, should build the western part of this new system, the government giving its financial and moral support. It was also decided that the government should itself build the eastern part of the new system, which when finished was to be leased to the Grand Trunk Pacific at a rental of 3 per cent. The report of the commission which investigated the government construction as far as it has been carried was abstracted in the *Railway Age Gazette* for February 20, page 394. As already indicated, the original estimate of the cost of the lines to be built by the government was \$61,500,000. The investigating committee reports that up to September, 1911, the total cost had reached \$109,000,000, and that estimates then made showed that the final cost would be \$161,300,000; also reports that if the road is completed at this figure it will in 1922, when, according to the terms of the contract it should be turned over to the Grand Trunk Pacific, have cost the people of Canada in prin-

capital and interest a total of \$234,651,521, or about \$130,000 a mile.

The commission attributes to various causes the waste which it charges has occurred. It mentions the fact that until 1911 the National Transcontinental Railway Commission contained no member who had had railway experience. It asserts that the New Brunswick section of the line, which parallels the government-owned Intercolonial, should never have been built, and implies that it was constructed for the purpose of placating the supporters of the former government east of Quebec. This part of the system alone cost \$35,000,000, and the tax-payers of the country are paying \$1,200,000 of interest annually on that sum. Numerous other examples of alleged expenditures for political rather than for transportation purposes are cited.

It should be noted that the project for the construction of the road was adopted by an administration controlled by one political party, while the investigation was conducted by a commission created by an administration controlled by another political party. Those not thoroughly familiar with conditions in Canada will have some difficulty in deciding both how much politics there has been in the construction of the National Transcontinental railway, and how much politics there is in the report of the commission which investigated it. But one of three things is certain: Either politics did cause numerous wastes in the construction; or politics has caused a misleading report to be made regarding the construction; or politics has both caused waste in the construction and a misleading report to be made regarding it. In any event, politics and government railroad management have got sadly mixed up. The fact that they have got so mixed in Canada is an indication of what would occur under government ownership in the United States. And even such friends of government ownership as Senator Kenyon, of Iowa, say that unless they were sure politics could be kept out of government management in the United States they would be opposed to government ownership here!

If evidence strongly corroborating the report that politics has got into government construction in Canada be wanted it can easily be found in the results of public management of the Intercolonial Railway, which always has been owned and operated by the Dominion. Annually for many years the Intercolonial has either barely earned its operating expenses, or has just failed to earn them. The fiscal year ended June 30, 1913, was one of those in which it just failed to earn them. Its deficit from operation was \$161,000, the ratio of its operating expenses to its gross earnings being 101.3 per cent. The capital stock of the Intercolonial up to June 30, 1912, was \$94,746,391. The government must pay interest on this investment whether the road earns it or not. Interest on it at 3½ per cent. is \$3,316,000. This, together with the \$161,000 deficit, makes a total of about \$3,500,000, which in a single year the tax-payers of Canada have to pay out of their pockets for the privilege of owning and operating the Intercolonial. The reasons why the road fails to earn its interest, or even its operating expenses, are that its rates are too low, and that its management has been inefficient. And the principal explanation of the way its rates have been made, and the way it has been operated, is political influence.

North American Review. 197: 295-311. March, 1913.

Public Ownership in France. Paul LeRoy-Beaulieu.

If we take up the state railway system of France we find all these shortcomings on a still larger scale. Prior to 1875, there were no railways of this kind in France. The plan generally adopted in France has been a concession to a private company for a period of ninety-nine years. For some of these companies a little more than half of the concession has now expired, and for others nearly one-half. At the end of this period of ninety-nine years—that is, between 1950 and 1960 for the principal companies—the railways will revert to the state, which does not mean, however, that the state will have to take over their management. The state can

then make a new concession on more advantageous terms for it and for the public, because if not all, at least the largest part of the capital used for the building of the roads will have been liquidated by the redemption, which the companies make every year, of a part of their shares and bonds. In France the state originally aided in the building of its railway system by moderate money subventions and by guaranteeing the payment of the interest on the capital used for the building of the secondary lines. The development of traffic and of net profits has generally made it unnecessary for the companies to have recourse to this plan of guaranteed interest, and the principal companies have already paid back, or will eventually be able to pay back, the sum advanced by the state for this purpose.

Thus, in the original plan of the French railway system the state took no part in the management. About the year 1875, circumstances threw into its hands a line which at first was not of very great importance; some small companies in the western part of France, between Bordeaux and Nantes, failed or got into financial difficulties, and the state, in order to preserve the shareholders from complete ruin, did what was not at all necessary—bought up the line belonging to these small companies, and instead of passing it on to a large and flourishing company decided to manage the line, at least provisionally. But this temporary arrangement finally became a permanent one, and gradually the line was lengthened until it reached Paris, so that there came to be in western France a line, linking the capital with Bordeaux and Nantes. This line, known as "the old state railway," is now about 3,000 kilometers in length, thus forming about a sixteenth part of the total length of the whole French railway system. The running of this road is very expensive. Its net revenues do not represent two per cent on the invested capital. It has had some terrible accidents of late, costing the lives of scores of passengers. The last one was due to the bad condition of a bridge over the Loire; the weakness of this bridge had been common report for a long time.

In 1908 the state added to its small system a much larger network of railways by taking over the important Western Company, which controlled the roads of Brittany, Normandy, and some neighboring departments, and which, starting at Paris, had as termini the seaports of Havre, Cherbourg, Brest and Nantes. This system embraces about 6,000 kilometers and brings up the total of the state roads to 9,000 kilometers, or nearly a fifth of the whole French system of railways.

For a long time the Radical party, which has been in power in France from 1898 to 1911, inclusive, has favored the policy of taking over the railways and having them managed by the state. This was one of the planks of the Radical platform as far back as 1889. The Conservative party, on the contrary, has always opposed this idea. The Ministers of Finance of the Third Republic, who have left the best names—M. Léon Say and M. Maurice Rouvier—always combated the proposal, whose financial and economic consequences they held would prove to be most disastrous. In 1908 the Clémenceau Cabinet, in which M. Caillaux was Minister of Finance and M. Barthou, Minister of Public Works, took over the management of the Western Company in the name of the state, notwithstanding the almost unanimous disapproval of the measure by the representatives of the region directly affected and the protests of nearly all of the French Chambers of Commerce. The bill was carried through the Chamber of Deputies without much trouble, but in the Senate it required a threat of a Cabinet crisis to obtain the small majority finally secured; and during the debate these ministers just mentioned repeatedly assured the recalcitrant senators that the transaction would cost the French Treasury nothing, that it would be an *opération blanche*, as the net receipts of the lines would cover the indemnity which had to be paid the company. Now, the state began its management in January, 1909—that is, four years ago, long enough for us to draw some conclusions. And what is the result?

The state management of the Western Railway has been from the very start, and continues to be, a great financial and technical disappointment. For the first two years the whole line was in absolutely chaotic condition. The trains were never on time and the worst possible accidents were continually happening, whereas under the old management not a single passenger had been killed in ten years. After many experiments, the new management was forced to reduce the number of trains and cut down the speed of the principal ones. Today the technical side is better than it was at first, but not better than it was under the old company. The financial results, however, could not be much worse than they are, and are a great load on the state treasury.

In the year 1908, the one preceding the operation of the road by the state, the old Western Company had a net deficit of 27,000,000 francs, and consequently, in accordance with the plan then in force, the company borrowed from the state this sum with which to pay the interest on its bonds and shares. In 1909, the first year that the state had control of the roads, this deficit rose to 38,500,000 francs, and continued to rise as follows during the succeeding years: 1910, 58,500,000; 1911, 71,250,000; 1912, estimated, 84,500,000; and 1913, estimated, 90,000,000 in round numbers. While I am writing these lines M. Chéron, Deputy and a former Assistant Secretary, published a report on the subject in the name of the Budget Committee of the Chamber of Deputies. He belongs to the Radical party, but has to admit that the figures of the estimated deficit for the year 1913 are "very disquieting," and adds that the estimated deficit for 1912, as well as that for 1913, is largely attributable to salaries of the employees, the increase under this head being 52,000,000 francs since the state took over the road. M. Chéron declares that he is "not accusing anybody," doubtless because he knows it would do no good. He says he might be willing to accept an increase in salaries and wages, but points out that there is an excessive augmentation in the number of employees. Here are his exact words on this point: "As

regards the increase of the personnel, it seems to me the administration has been rather large. But the same thing is true of all the departments." And then he concludes with these words: "In this matter of the augmentation of the personnel, I understand it has reached the maximum." This reflection of an out-and-out Radical Deputy is very characteristic. In the government offices, at least in France, there is always a tendency to over-increase the number of the employed. But in this way more citizens are made happy, and the party in power fares better at the elections.

Thus, as we have seen, the trial of state ownership in France is directly against that system and consequently public opinion is now completely opposed thereto, especially enlightened, as it now is, by the financial and other shortcomings which have followed the state operation of the Western Railway. It may be regarded as certain that, notwithstanding the seventy Socialist Deputies in the Chamber, it will be a good many years before another French Minister of Finance will venture to propose the state taking over another railway.

Railway Age Gazette. 56: 365-6. February 20, 1914.

State Railway Operation in Western Australia.

Francis A. Bonner.

Few know the defects more to their sorrow than the western Australian railways. There, in that tiny system, rises the usual spectacle of a government railway commissioner charged with operation for the people, recognizing and owning publicly to these selfsame evils of state ownership, pointing the danger and fighting in vain to induce his own government to apply a remedy and check its headlong course toward financial ruin of its carriers. When two such policies come together—placation of a labor vote by greater payment of wages, placation of a larger vote by reducing rates, and thus the wherewithal to make the payments—financial stability is likely to suffer from the impact.

In western Australia earnings for the fiscal year to June 30, 1913, for the first time in history exceeds £2,000,000 (\$9,740,000). A gain in gross of \$746,000, however, was offset by a rise in expenses of \$791,000 over the year before. Interest paid on debt rose on the average from 3.46 to 3.52 per cent. Surplus fell in two years from \$1,090,000 to \$122,000; the net return on capital from 5.32 to 3.56 per cent. The margin between that 3.52 per cent interest paid on debt and this 3.56 per cent net with which to pay it measured on June 30, 1913, the western Australian railway's distance from bankruptcy.

Such a condition occasions little surprise after consideration of what this government system has done to curry favor of its voting passengers. Requests for increased facilities have arisen so frequently and are pressed so strongly, the department has erred so consistently on the side of liberality that the commissioner of railways cries loudly now for a halt. Passenger train mileage and reduced fares must be curtailed severely if ruin is to be avoided. So great has been the surplus of generosity, in fact, that nothing save a deficit is left for passenger traffic. Apportioning mixed train mileage and adding passenger train mileage, the earnings from fares represented for the last year \$1.05 per train mile. The cost of working was \$1.29 per train mile. In working cost alone there was thus a loss of 24 cents per train mile exclusive of 43 cents chargeable for interest! Despite an increase of population of nearly 50 per cent in ten years and increased weight, capacity and standards of equipment, the receipt per passenger train mile in 1912-13 was less than in the year 1902-3.

Much of the loss, it is true, arises from a steady decline in length of journeys with consequent loss in the average receipt per journey. But it rests also upon the effect of excursion fares now applying to a larger number of journeys on a greater number of days and over greater areas, while in company with repeated rate concessions in deference to demands of the public for increased facilities, passenger

train mileage^f has risen consistently, much of this addition being empty. "When these conditions are realized," says the commissioner, "it may well be seen that the department must rather look for openings to reduce passenger train mileage than to increase it, and for openings to increase fares rather than the reverse."

Unremunerative rates for freight service have arisen largely from a policy of "fostering infant industries" which the present management denounces as now useless to the industries and ruinous to the railway. Agriculture and coal mines have been the chief beneficiaries. Since 1907 fertilizer has been carried at $\frac{1}{2}$ cent per ton-mile, a rate pronounced unparalleled in Australia (though by no means in the United States) for the purpose of encouraging the growing of wheat and development of new agricultural areas. The commodity, it was urged, would be carried in cars otherwise run empty to the country to return laden with wheat: the rate was necessary in order to induce more general use of fertilizers, increase the yield per acre and thus add to the railway revenue. This traffic has failed, however, to move as expected and the older farming districts now are pronounced well able to pay in full for the cost of service. Advance to the "miscellaneous" rate is demanded by the management, which would raise the charge to 2.4 cents per ton per mile.

Coal has been enjoying a rate of 30 cents per ton for the first 5 miles plus 1 cent per ton-mile thereafter. Denouncement of such a rate as excessively low is interesting when we contrast the rate of .47 cent per ton-mile on bituminous coal which is the average on United States railways. Yet for coal also an advance to the miscellaneous rate is demanded on the ground that this industry too is amply able now to stand upon its own feet.

Solely because of these profitable rates on fertilizer and coal and excessive payments for fuel, the government railways last year lost some \$371,000 which must come out of the tax-payer's pocket if the system is not to deteriorate.

But to make matters still worse wage concessions cut even larger slices from these depleted earnings. Nor has benefit ensued. "Improvement in conditions of employment," says the commissioner, "has not put an end to the demands made upon the department." In two years wages and salaries on these little railways have risen \$1,110,000. Salaried employees have gained an average of some \$35.00, wages staff some \$73 annually per man; gains which suggest significantly to say the least, the comparative numerical strength and organization of the workers affected. Why such expansion has been allowed to consume the meager substance of the railways is best told, by the commissioner himself:

"The year under review has been one of continual pressure from the staff generally for increased remuneration and emoluments and it is with regret I have to refer again to the evil of political influence in this connection.

"If such matters are taken in hand by members of Parliament or of the government, acquiescence is thereby given to the action of those who have approached them and the railway administration is powerless to do more than protest.

"Unless the practice referred to is put down with a strong hand by those in whose power it lies to put it down that portion of the government railway act which was and is intended to remove the railways from political influence will become a dead letter. In any case it is a question of time alone when concessions so made to unreasonable demands from departmental employees are bound to result in revulsion of public opinion."

How has efficiency responded to these easy won concessions?

"It is with regret," says the railway chief, "that I have observed no general increase of energy or effort corresponding with such a large increase of expenditure."

And why should he expect to? Where neither the quality nor quantity of service nor any resultant of supply and de-

mand in the labor market but merely the strength of numbers behind an appeal activates excessive concessions of the kind at the hands of a subservient master, what relation exists between wages and efficiency? Where it is not the justice of labor's plea but solely the force of combined voices which encompasses the desired end, where economic law is discarded and an idea fostered that the government is moved not by reason but by fear at the brandishing of organized labor's weapon of the strike, what relation remains in labor's mind betwixt zeal and compensation?

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